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* * * * * Welcome to STN International * * * * *

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NEWS 2 DEC 01 ChemPort single article sales feature unavailable
NEWS 3 JUN 01 CAS REGISTRY Source of Registration (SR) searching
enhanced on STN
NEWS 4 JUN 26 NUTRACEUT and PHARMAML no longer updated
NEWS 5 JUN 29 IMSCOPROFILE now reloaded monthly
NEWS 6 JUN 29 EFFULL adds Simultaneous Left and Right Truncation
(SLART) to AB, MCLM, and TI fields
NEWS 7 JUL 09 PATDPAFULL adds Simultaneous Left and Right
Truncation (SLART) to AB, CLM, MCLM, and TI fields
NEWS 8 JUL 14 USGENE enhances coverage of patent sequence location
(PSL) data
NEWS 9 JUL 27 CA/CAPLUS enhanced with new citing references
NEWS 10 JUL 16 GBFULL adds patent backfile data to 1855
NEWS 11 JUL 21 USGENE adds bibliographic and sequence information
NEWS 12 JUL 28 EFFULL adds first-page images and applicant-cited
references
NEWS 13 JUL 28 INPADOCDB and INPAFAMDB add Russian legal status data
_ NEWS 14 AUG 10 Time limit for inactive STN sessions doubles to 40
minutes
NEWS 15 AUG 18 COMPENDEX indexing changed for the Corporate Source
(CS) field
NEWS 16 AUG 24 ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS 17 AUG 24 CA/CAPLUS enhanced with legal status information for
U.S. patents
NEWS 18 SEP 09 50 Millionth Unique Chemical Substance Recorded in
CAS REGISTRY
NEWS 19 SEP 11 WPIDS, WPINDEX, and WPIX now include Japanese FTERM
thesaurus

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 21:58:30 ON 28 SEP 2009

=> FILE REG
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.22 | 0.22 |

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 21:58:48 ON 28 SEP 2009
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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6
DICTIONARY FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>
Uploading C:\TDH PTA\Application Examination\Series 10\10 588187\STN 10 588187
092809AA.str



chain nodes :

1 2 3 4 5 6 7 8 9 12 13 14 15 16 17 18 19 21 22 23 24 25 26
27 28 29 30 31 32 33 34 35 36

```

chain bonds :
1-2 1-3 2-4 2-8 2-9 3-21 3-29 3-12 4-5 5-6 5-7 12-13 13-14 13-18 13-19
14-15 15-16 15-17 21-22 22-23 22-27 22-28 23-24 24-25 24-26 29-30 30-31
30-35 30-36 31-32 32-33 32-34
exact/norm bonds :
1-2 1-3 2-4 2-8 2-9 3-21 3-29 3-12 4-5 5-6 5-7 12-13 13-14 13-18 13-19
14-15 15-16 15-17 21-22 22-23 22-27 22-28 23-24 24-25 24-26 29-30 30-31
30-35 30-36 31-32 32-33 32-34

```

G1:H,Ak

G2:Si,Hf

```

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS
21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS
29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS

```

Element Count :

Node 4: Limited

C,C1-20

Node 8: Limited

C,C1-8

Node 14: Limited

C,C1-20

Node 16: Limited

C,C1-6

Node 17: Limited

C,C1-6

Node 18: Limited

C,C1-8

Node 23: Limited

C,C1-20

Node 25: Limited

C,C1-6

Node 26: Limited

C,C1-6

Node 27: Limited

C,C1-8

Node 31: Limited

C,C1-20

Node 33: Limited

C,C1-6

Node 34: Limited

C,C1-6

Node 35: Limited

L1 STRUCTURE UPLOADED

=> D

L1 HAS NO ANSWERS

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> S L1 SSS SAM

SAMPLE SEARCH INITIATED 21:59:46 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 758 TO ITERATE

100.0% PROCESSED 758 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 13509 TO 16811

PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> S L1 SSS FULL

FULL SEARCH INITIATED 21:59:52 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 15802 TO ITERATE

100.0% PROCESSED 15802 ITERATIONS

5 ANSWERS

SEARCH TIME: 00.00.01

L3 5 SEA SSS FUL L1

=> D L3 1-5

L3 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN

RN 864656-16-6 REGISTRY

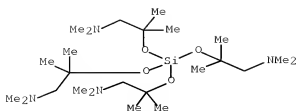
ED Entered STN: 07 Oct 2005

CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)-1,1-dimethylethyl] ester
(9CI) (CA INDEX NAME)

MF C24 H56 N4 O4 Si

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

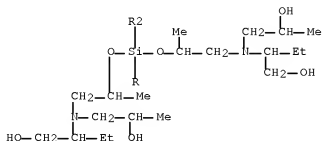


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

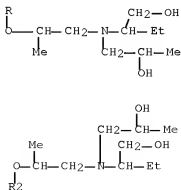
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN
RN 106713-00-2 REGISTRY
ED Entered STN: 21 Feb 1987
CN 2-Propanol, 1,1'-[[1-(hydroxymethyl)propyl]imino]di-, silicate (7CI) (CA
INDEX NAME)
MF C40 H88 N4 O12 Si
SR CA
LC STN Files: CA, CAPLUS

PAGE 1-A



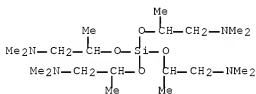
PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

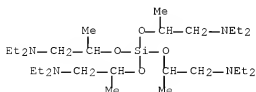
L3 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN
RN 28911-46-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)-1-methylethyl] ester
(9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Propanol, 1-(dimethylamino)-, tetraester with silicic acid (H4SiO4)
(8CI)
MF C20 H48 N4 O4 Si
LC STN Files: BEILSTEIN*, CA, CAPLUS, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN
RN 18881-85-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Propanol, 1-(diethylamino)-, tetraester with silicic acid (H4SiO4) (8CI)
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Propanol, 1-(diethylamino)-, silicate (7CI)
MF C28 H64 N4 O4 Si
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2009 ACS on STN
RN 18843-94-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN 2-Pentanol, 5-(diethylamino)-, ester with silicic acid (H4SiO4) (4:1)
(8CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Pentanol, 5-(diethylamino)-, silicate (7CI)
MF C36 H80 N4 O4 Si
LC STN Files: BEILSTEIN*, CA, CAPLUS
(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FILE STNGUIDE
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 197.57 | 197.79 |

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 22:01:02 ON 28 SEP 2009
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 25, 2009 (20090925/UP).

=> file caplus
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 1.68 | 199.47 |

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 22:15:41 ON 28 SEP 2009
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FILE COVERS 1907 - 28 Sep 2009 VOL 151 ISS 14
FILE LAST UPDATED: 27 Sep 2009 (20090927/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAPLUS family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> S L3

L4 8 L3

=> D L4 1-8 IBIB ABS HITSTR

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:513536 CAPLUS Full-text
DOCUMENT NUMBER: 145:19143
TITLE: Semiconductor device fabrication and substrate treatment apparatus
INVENTOR(S): Sano, Atsushi; Horii, Sadayoshi; Itatani, Hideharu; Yamamoto, Katsuhiko
PATENT ASSIGNEE(S): Hitachi Kokusai Electric Inc., Japan
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

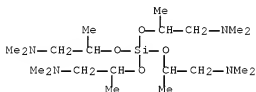
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2006057400 | A1 | 20060601 | WO 2005-JP21855 | 20051129 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM US 20080032514 A1 20080207 US 2007-791222 20070629 PRIORITY APPLN. INFO.: JP 2004-344755 A 20041129 WO 2005-JP21855 W 20051129 | | | | |

AB A high quality semiconductor device is manufd. by controlling the metal/Si concentration ratio in high-k metal silicate films. The process involves controlling the feed rate ratio between a metal-containing 1st reactant and a Si/N-containing 2nd reactant in a reaction chamber to control the metal/Si concentration ratio in the metal silicate film which is deposited on a substrate. The 1st and 2nd reactants may be $\text{Hf}(\text{OCMeCH}_2\text{OMe})_4$ and $\text{Si}(\text{OCHMeCH}_2\text{NMe}_2)_4$, resp., for improved controlling in Hf/Si ratio, even varied concentration distribution through film thickness direction in the HfSiO films.

IT 28911-46-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (semiconductor device fabrication and substrate treatment apparatus by MOCVD deposition of hafnium silicate films)

RN 28911-46-8 CAPLUS

CN Silicic acid (H_4SiO_4), tetrakis[2-(dimethylamino)-1-methylethyl] ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1004690 CAPLUS Full-text
 DOCUMENT NUMBER: 143:316927
 TITLE: Alkoxide compound, raw material for thin film formation and process for producing thin film
 INVENTOR(S): Sato, Hiroki; Sakurai, Atsushi
 PATENT ASSIGNEE(S): Asahi Denka Co., Ltd., Japan

SOURCE: PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|----------------------|------------|
| WO 2005085175 | A1 | 20050915 | WO 2005-JP2118 | 20050214 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CN 1914150 | A | 20070214 | CN 2005-80004018 | 20050214 |
| DE 112005000134 | T5 | 20070215 | DE 2005-112005000134 | 20050214 |
| US 20090035464 | A1 | 20090205 | US 2006-588187 | 20060802 |
| KR 2006111694 | A | 20061027 | KR 2006-716119 | 20060810 |
| PRIORITY APPLN. INFO.: | | | JP 2004-41427 | A 20040218 |
| | | | WO 2005-JP2118 | W 20050214 |

OTHER SOURCE(S): MARPAT 143:316927

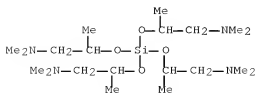
AB An alkoxide compd. is described, that is represented by the following general formula $M(OCR_1R_2ANR_3R_4)_n$, where one of R_1 and R_2 is a C1-C4 alkyl while the other is a H atom or C1-C4 alkyl; each of R_3 and R_4 is a C1-C4 alkyl; A is a C1-C8 alkanediyl; M is a Si or Hf atom; and n is 4, and is suitable to a raw material for thin film formation for use in a process of thin film formation though compound evaporation, such as CVD process. Further, there is provided a raw material for thin film formation comprising the above alkoxide compound. Still further, there is provided a process for producing a thin film, comprising vaporizing the above raw material for thin film formation to thereby obtain a vapor containing the alkoxide compound, introducing the vapor onto a substratum, and performing decomposition and/or chemical reaction thereof to thereby form a thin film on the substratum.

IT 28911-46-8P 864656-16-6P

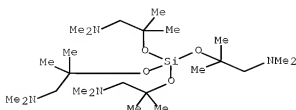
RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (alkoxide compound, raw material for thin film formation and process for producing thin film)

RN 28911-46-8 CAPLUS

CN Silicic acid (H_4SiO_4), tetrakis[2-(dimethylamino)-1-methylethyl] ester (9CI) (CA INDEX NAME)

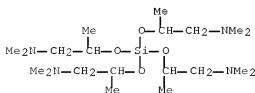


RN 864656-16-6 CAPLUS
 CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)-1,1-dimethylethyl] ester (9CI) (CA INDEX NAME)

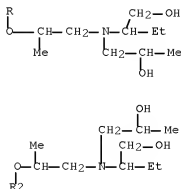
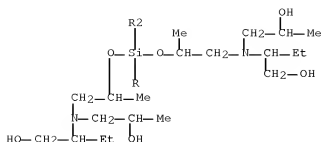


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1972:475256 CAPLUS [Full-text](#)
 DOCUMENT NUMBER: 77:75256
 ORIGINAL REFERENCE NO.: 77:12431a,12434a
 TITLE: Nitrogen-containing organosilicon compounds. XXXI.
 Silylation of aminopropanols and aminobutanols
 AUTHOR(S): Lukevics, E.; Liberts, L.
 CORPORATE SOURCE: Inst. Org. Synth., Riga, USSR
 SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas Serija (1972), (2), 203-6
 CODEN: LZAKAM; ISSN: 0002-3248
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Silylation of HOZNR2 [Z = (CH2)3, CHMeCH2, CH2CH2CHMe, CH2CMe2; R = H, Me, Et] by (Me3Si)2NH (I), Me3SiNEt2 (II), hexamethylcyclotrisilazane, MeSi(OEt)3, MeSi(OBu)3, and Si(OEt)4 in the presence of Na at 110-50° afforded the corresponding MeSi(OZNR2)4-n in 41.7-82.5% yield; similarly, (HOCH2)2CMeNH2 and I gave 78.6% (Me3SiOCH2)2CMeNH2(III). Silylation of Me3SiOZNR2 [Z = (CH2)3, CHMeCH2] and III by II gave the N, O-bis(trimethylsilyl) derivs. in 41.5-75.3% yield.
 IT 28911-46-8P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 28911-46-8 CAPLUS
 CN Silicic acid (H4SiO4), tetrakis[2-(dimethylamino)-1-methylethyl] ester (9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1970:509835 CAPLUS [Full-text](#)
 DOCUMENT NUMBER: 73:109835



L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1962:475392 CAPLUS Full-text

DOCUMENT NUMBER: 57:75392

ORIGINAL REFERENCE NO.: 57:14922g-i

TITLE: Synthesis and pharmacological effects of bis(trialkylammonium)alkanol carbonates

AUTHOR(S): Pohoryles, Leo A.; Wislicki, L.; Sarel, Shalom

CORPORATE SOURCE: Hebrew Univ., Jerusalem, Israel

SOURCE: Journal of Pharmaceutical Sciences (1962), 51, 348-51

CODEN: JPMSAE; ISSN: 0022-3549

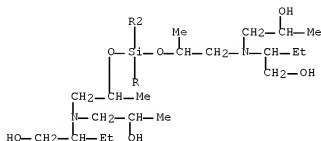
DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

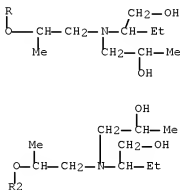
AB By the phosgenation of the appropriate ω -dialkylaminoalkanol followed by the quaternization of the corresponding base by MeI , the following bis(trialkylammonium)alkyl carbonate diiodides were prepared (m.p. and yield given): trimethyl-ammoniummethyl (I), $203-5^\circ$, 50-60%; 1-trimethylammonium-2-propyl (II), 242° , 18%; 1-trimethylammonium-3-propyl (III), $166-7^\circ$, 65%; 1-dimethylammonium-3-propyl (IV), 189° , 40%; 1-diethylmethylammonium-3-propyl (V), $197-9^\circ$, 60%; 1-trimethylammonium-4-butyl (VI), 186° , 57%; 1-trimethylammonium-4-butyl (VII), 280° (decomposition). -. Blood pressure was lowered without affecting the muscle twitch by I. Neuromuscular transmission and direct muscle excitability were depressed by VI, III, and I in that order. All effects were weaker in II, IV, V and VII.

IT 106713-00-2P, 2-Propanol,
 1,1'-[[1-(hydroxymethyl)propyl]imino]di-, silicate
 RL: PREP (Preparation)
 (preparation of)
 RN 106713-00-2 CAPLUS
 CN 2-Propanol, 1,1'-[[1-(hydroxymethyl)propyl]imino]di-, silicate (7CI) (CA
 INDEX NAME)

PAGE 1-A



PAGE 2-A



L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1962:18394 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 56:18394

ORIGINAL REFERENCE NO.: 56:3502d-g

TITLE: Silanol esters of inorganic acids. IV. Sulfation of alkylsiloxanes with halosulfuric acids and esters

AUTHOR(S): Schmidt, Max; Schmidbaur, Hubert

CORPORATE SOURCE: Univ. Munich, Germany

SOURCE: Chemische Berichte (1961), 94, 2446-50

CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. CA 54, 15225e.-Alkylsiloxanes are sulfated by ClSO₃H (I) to alkylsilyl sulfates with the elimination of HCl. FSO₃H (II) gives similarly alkylfluorosilanes and pyrosulfuric acid. While alkyl chlorosulfates hardly react with siloxanes, the silyl esters are strong sulfating agents which are

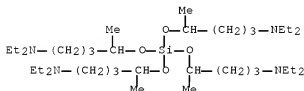
capable of converting siloxanes into alkylsilyl sulfates with the elimination of alkylchlorosilanes. I (11.6 g.) added with stirring at room temperature to 16.2 g. (Me₃Si)₂O(III) and the mixture heated 2 hrs. at 100° and evaporated in vacuo gave 19.8 g. (Me₃SiO)₂SO₂ (IV), m. 55-7°. I (16.5 g.) with 10.5 g. octamethylcyclotetrasiloxane (V) gave similarly 18.9 g. (Me₂SiOSiO₃)₂ (VI), m. 100-16° (C₆H₆-petr. ether). III and ClSO₃Me or ClSO₃Et (equivalent amts.) refluxed several hrs. gave only very small amts. of alkyl chlorides. Me₃SiO₃SCl (5.25 g.) and 4.52 g. III mixed and then refluxed several hrs. gave 2.86 g. Me₃SiCl, b. 55-6.5°, and 6.48 g. IV, b₃ 80-3°, m. 55-73°. Me₂Si(O₃SCl)₂ (8.65 g.) and 4.44 g. V yielded similarly 3.65 g. Me₂SiCl₂ and 9.35 g. VI, m. 103-18° b_{0.1} 145-8°. III (6.1 g.) treated dropwise with stirring with 15.6 g. II and heated 3.5 hrs. at 80° gave 5.55 g. Me₃SiF, b₇₂₅, 12-14.5°; the residue consisted of II, SO₃, H₂SO₄, and H₂SO₄-silyl esters.

IT 18843-94-2

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 18843-94-2 CAPLUS

CN 2-Pentanol, 5-(diethylamino)-, ester with silicic acid (H₄SiO₄) (4:1)
(8CI) (CA INDEX NAME)



L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1962:18393 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 56:18393

ORIGINAL REFERENCE NO.: 56:3502c-d

TITLE: Silicate esters and related compounds

AUTHOR(S): Abbott, A. Doyle; Wright, James R.; Goldschmidt, Alfred; Stewart, William T.; Bolt, Robert O.

CORPORATE SOURCE: California Research Corp., Richmond

SOURCE: Journal of Chemical and Engineering Data (1961), 6, 437-42

CODEN: JCEAAX; ISSN: 0021-9568

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

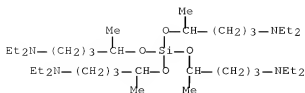
AB -Data are given for phys. and chem. properties of 49 tetraalkoxysilanes, hexaalkoxydisilanes, polyalkoxysiloxanes, and bis(trialkoxysilyl) ethanes, phys. properties of 20 silicate derivs. of ali phatic and aromatic diols, and 9 miscellaneous silicate derivs. A discussion of hydrolytic stability is given.

IT 18843-94-2

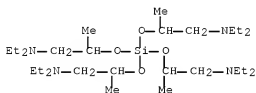
(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 18843-94-2 CAPLUS

CN 2-Pentanol, 5-(diethylamino)-, ester with silicic acid (H₄SiO₄) (4:1)
(8CI) (CA INDEX NAME)



IT 18881-85-1, 2-Propanol, 1-(diethylamino)-, silicate
 (properties of)
 RN 18881-85-1 CAPLUS
 CN 2-Propanol, 1-(diethylamino)-, tetraester with silicic acid (H4SiO4) (8CI)
 (CA INDEX NAME)



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
 (6 CITINGS)

=> FILE STNGUIDE

| | | |
|--|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 45.62 | 245.09 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -6.56 | -6.56 |

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FILE CONTAINS CURRENT INFORMATION.
 LAST RELOADED: Sep 25, 2009 (20090925/UP).

=> FILE REG

| | | |
|--|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 1.40 | 246.49 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -6.56 |

FILE 'REGISTRY' ENTERED AT 22:28:21 ON 28 SEP 2009
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STRUCTURE FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6
DICTIONARY FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

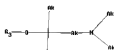
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\TDH PTA\Application Examination\Series 10\10 588187\STN\STN 10 588187 092809AB.str



chain nodes :
1 2 3 4 5 6 7 8 9
chain bonds :
1-2 1-3 2-4 2-8 2-9 4-5 5-6 5-7
exact/norm bonds :
1-2 1-3 2-4 2-8 2-9 4-5 5-6 5-7

G1:H,Ak

G2:Si,Hf

G3:Hf,Zr

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS

Element Count :
Node 4: Limited
C,C1-20

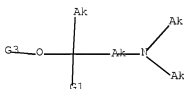
Node 8: Limited
C,C1-8

L5 STRUCTURE UPLOADED

=> D

L5 HAS NO ANSWERS

L5 STR



G1 H, Ak

G2 Si, Hf

G3 Hf, Zr

Structure attributes must be viewed using STN Express query preparation.

=> S L5 SSS SSAM

COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID

The query entered contains both search terms created by structure-building or screen commands and text search terms. L#s created via the STRUCTURE or SCREEN commands must be searched in the structures files separately from text terms or profiles. The L# answer sets from structure searches can be used in crossover searches and can be combined with text terms.

=> S L5 SSS SAM

SAMPLE SEARCH INITIATED 22:28:42 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 435 TO ITERATE

100.0% PROCESSED 435 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 7449 TO 9951

PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> S L5 SSS FULL

FULL SEARCH INITIATED 22:28:47 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 8689 TO ITERATE

100.0% PROCESSED 8689 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L7 0 SEA SSS FUL L5

=> FILE STNGUIDE
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 185.88 | 432.37 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.00 | -6.56 |

CA SUBSCRIBER PRICE

FILE 'STNGUIDE' ENTERED AT 22:28:59 ON 28 SEP 2009
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 25, 2009 (20090925/UP).

=> FILE REG
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.14 | 432.51 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.00 | -6.56 |

CA SUBSCRIBER PRICE

FILE 'REGISTRY' ENTERED AT 22:30:15 ON 28 SEP 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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provided by InfoChem.

STRUCTURE FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6
DICTIONARY FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=>
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092809AC.str

H₂ — O — Ak — N

3 — 1 — 2 — 4

chain nodes :
 1 2 3 4
 chain bonds :
 1-2 1-3 2-4
 exact/norm bonds :
 1-2 1-3 2-4

G1:H,Ak

G2:Si,Hf

G3:Hf,Zr

Match level :
 1:CLASS 2:CLASS 3:CLASS 4:CLASS

L8 STRUCTURE UPLOADED

=> D
 L8 HAS NO ANSWERS
 L8 STR

G3 — O — Ak — N
 g1 H,Ak
 g2 Si,Hf
 g3 Hf,Zr

Structure attributes must be viewed using STN Express query preparation.

=> S L8 SSS SAM
 SAMPLE SEARCH INITIATED 22:30:36 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 673 TO ITERATE

100.0% PROCESSED 673 ITERATIONS 3 ANSWERS
 SEARCH TIME: 00.00.01

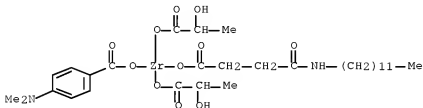
FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**
 PROJECTED ITERATIONS: 11904 TO 15016
 PROJECTED ANSWERS: 3 TO 162

L9 3 SEA SSS SAM L8

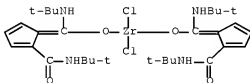
=> D SCAN

L9 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 IN Zirconium, [4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-
 O1]bis(2-hydroxypropanoato-O1)-, (T-4)- (9CI)
 MF C31 H50 N2 O11 Zr



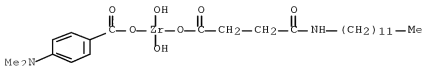
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L9 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 IN Zirconium, dichlorobis[N-(1,1-dimethylethyl)-5-[[[(1,1-dimethylethyl)amino](hydroxy-κO)methylene]-1,3-cyclopentadiene-1-carboxamidato]-, (T-4)-
 MF C30 H46 Cl2 N4 O4 Zr



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L9 3 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN
 IN Zirconium, [4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O1]dihydroxy-, (T-4)- (9CI)
 MF C25 H42 N2 O7 Zr



ALL ANSWERS HAVE BEEN SCANNED

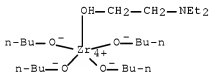
=> S L8 SSS FULL
FULL SEARCH INITIATED 22:31:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 13411 TO ITERATE

100.0% PROCESSED 13411 ITERATIONS 33 ANSWERS
SEARCH TIME: 00.00.01

L10 33 SEA SSS FUL L8

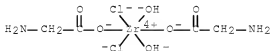
=> D L10 1-33

L10 ANSWER 1 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 783349-98-4 REGISTRY
ED Entered STN: 18 Nov 2004
CN Ethanol, 2-diethylamino-, compd. with Zr butoxide (6CI) (CA INDEX NAME)
MF C22 H51 N O5 Zr
CI CCS
SR CAS EARLY REGISTRATIONS
LC STN Files: CA, CAPLUS, USPATOLD



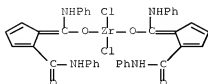
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 2 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 782398-18-9 REGISTRY
ED Entered STN: 16 Nov 2004
CN Zirconate(2-), dichlorobis(glycinato-O)dihydroxy- (9CI) (CA INDEX NAME)
MF C4 H10 Cl2 N2 O6 Zr
CI CCS, COM
SR CA



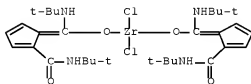
L10 ANSWER 3 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 233683-28-8 REGISTRY
ED Entered STN: 19 Aug 1999
CN Zirconium, dichlorobis[5-[(hydroxy-kO)(phenylamino)methylene]-N-

phenyl-1,3-cyclopentadiene-1-carboxamidato]-, (T-4)- (CA INDEX NAME)
 MF C38 H30 Cl2 N4 O4 Zr
 SR CA
 LC STN Files: CA, CAPLUS



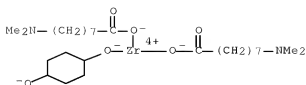
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 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 4 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 233683-27-7 REGISTRY
 ED Entered STN: 19 Aug 1999
 CN Zirconium, dichlorobis[N-(1,1-dimethylethyl)-5-[(1,1-dimethylethyl)amino](hydroxy-κO)methylene]-1,3-cyclopentadiene-1-carboxamidato]-, (T-4)- (CA INDEX NAME)
 MF C30 H46 Cl2 N4 O4 Zr
 SR CA
 LC STN Files: CA, CAPLUS



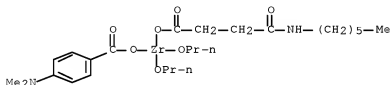
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 5 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 228718-22-7 REGISTRY
 ED Entered STN: 23 Jul 1999
 CN Zirconium, [1,4-cyclohexanediolato(2-)-κO]bis[8-(dimethylamino)octanoato-κO]- (CA INDEX NAME)
 MF C26 H50 N2 O6 Zr
 CI CCS
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER



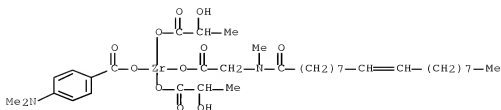
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 6 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 111318-96-8 REGISTRY
ED Entered STN: 14 Nov 1987
CN Zirconium, [4-(dimethylamino)benzoato-O][4-(hexylamino)-4-oxobutanoato-O]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Butanoic acid, 4-(hexylamino)-4-oxo-, zirconium complex
MF C25 H42 N2 O7 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



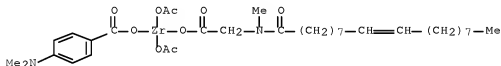
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 7 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-19-3 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [4-(dimethylamino)benzoato-O]bis(2-hydroxypropanoato-O1)[N-methyl-N-(1-oxo-9-octadecenyl)glycinato-O1]-, [T-4-(Z)]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Glycine, N-methyl-N-(1-oxo-9-octadecenyl)-, zirconium complex, (Z)-
CN Propanoic acid, 2-hydroxy-, zirconium complex
MF C36 H58 N2 O11 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



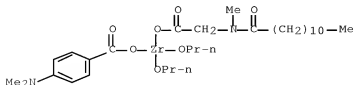
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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 8 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-18-2 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][N-methyl-N-(1-oxo-9-octadecenyl)glycinato-O1]-, [T-4-(Z)]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Glycine, N-methyl-N-(1-oxo-9-octadecenyl)-, zirconium complex, (Z)-
MF C34 H54 N2 O9 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



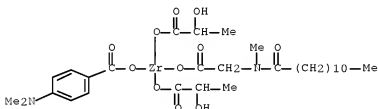
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 9 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-17-1 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [4-(dimethylamino)benzoato-O][N-methyl-N-(1-oxododecyl)glycinato-O1]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Glycine, N-methyl-N-(1-oxododecyl)-, zirconium complex
MF C30 H52 N2 O7 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



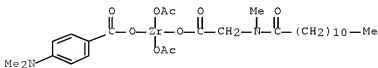
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 10 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-16-0 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [4-(dimethylamino)benzoato-O]bis(2-hydroxypropanoato-O1)[N-methyl-N-(1-oxododecyl)glycinato-O1]-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Glycine, N-methyl-N-(1-oxododecyl)-, zirconium complex
CN Propanoic acid, 2-hydroxy-, zirconium complex
MF C30 H48 N2 O11 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 11 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-15-9 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][N-methyl-N-(1-oxododecyl)glycinato-O1]-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Glycine, N-methyl-N-(1-oxododecyl)-, zirconium complex
MF C28 H44 N2 O9 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

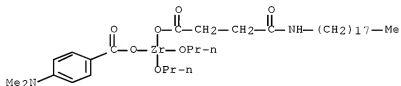


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 12 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-14-8 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [4-(dimethylamino)benzoato-O][4-(octadecylamino)-4-oxobutanoato-O1]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-(octadecylamino)-4-oxo-, zirconium complex
 MF C37 H66 N2 O7 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

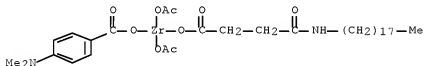


1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 13 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-13-7 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-(octadecylamino)-4-oxobutanoato-O]-, (T-4)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-(octadecylamino)-4-oxo-, zirconium complex
 MF C35 H58 N2 O9 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

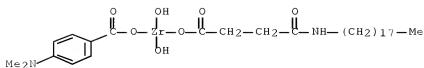


1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 14 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-12-6 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, [4-(dimethylamino)benzoato-O]dihydroxy[4-(octadecylamino)-4-oxobutanoato-O]-, (T-4)- (9CI) (CA INDEX NAME)

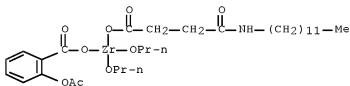
OTHER CA INDEX NAMES:

CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-(octadecylamino)-4-oxo-, zirconium complex
 MF C31 H54 N2 O7 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



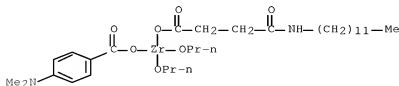
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 15 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-11-5 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [2-(acetyloxy)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 2-(acetyloxy)-, zirconium complex
CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex
MF C31 H51 N O9 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

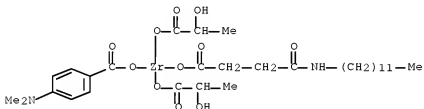
L10 ANSWER 16 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-10-4 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex
MF C31 H54 N2 O7 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

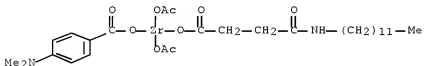
L10 ANSWER 17 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-09-1 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, [4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O]bis(2-hydroxypropanoato-Ol)-, (T-4)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex
 CN Propanoic acid, 2-hydroxy-, zirconium complex
 MF C31 H50 N2 O11 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 18 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-08-0 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O]l)-, (T-4)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex
 MF C29 H46 N2 O9 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL

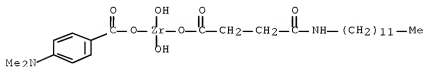


1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

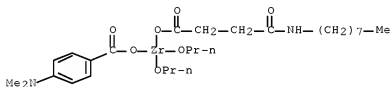
L10 ANSWER 19 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-07-9 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, [4-(dimethylamino)benzoato-O][4-(dodecylamino)-4-oxobutanoato-O]dihydroxy-, (T-4)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:

CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-(dodecylamino)-4-oxo-, zirconium complex
 MF C25 H42 N2 O7 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



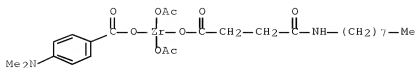
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 20 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-06-8 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, [4-(dimethylamino)benzoato-O][4-(octylamino)-4-oxobutanoato-O]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-(octylamino)-4-oxo-, zirconium complex
 MF C27 H46 N2 O7 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



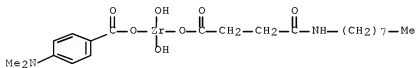
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 21 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-05-7 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-(octylamino)-4-oxobutanoato-O]-, (T-4)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-(octylamino)-4-oxo-, zirconium complex
 MF C25 H38 N2 O9 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



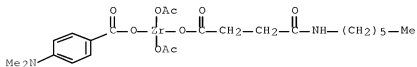
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 22 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-04-6 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [4-(dimethylamino)benzoate-O]dihydroxy[4-(octylamino)-4-oxobutanoate-O]1-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Butanoic acid, 4-(octylamino)-4-oxo-, zirconium complex
MF C21 H34 N2 O7 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



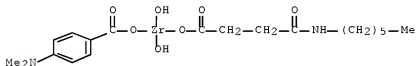
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 23 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110035-03-5 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoate-O][4-(hexylamino)-4-oxobutanoate-O]1-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Butanoic acid, 4-(hexylamino)-4-oxo-, zirconium complex
MF C23 H34 N2 O9 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



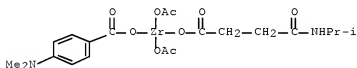
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 24 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-02-4 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, [4-(dimethylamino)benzoato-O][4-(hexylamino)-4-oxobutanoato-O]dihydroxy-, (T-4)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-(hexylamino)-4-oxo-, zirconium complex
 MF C19 H30 N2 O7 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



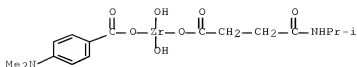
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 25 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-01-3 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-[(1-methylethyl)amino]-4-oxobutanoato-O]-, (T-4)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-[(1-methylethyl)amino]-4-oxo-, zirconium complex
 MF C20 H28 N2 O9 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



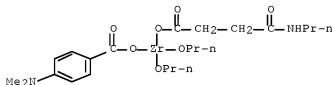
1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 26 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
 RN 110035-00-2 REGISTRY
 ED Entered STN: 29 Aug 1987
 CN Zirconium, [4-(dimethylamino)benzoato-O]dihydroxy[4-[(1-methylethyl)amino]-4-oxobutanoato-O]-, (T-4)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
 CN Butanoic acid, 4-[(1-methylethyl)amino]-4-oxo-, zirconium complex
 MF C16 H24 N2 O7 Zr
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



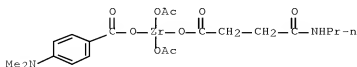
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 27 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110034-99-6 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [4-(dimethylamino)benzoato-O][4-oxo-4-(propylamino)butanoato-O]dipropoxy-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Butanoic acid, 4-oxo-4-(propylamino)-, zirconium complex
MF C22 H36 N2 O7 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



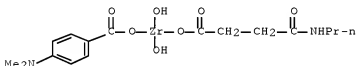
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 28 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110034-98-5 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, bis(acetato-O)[4-(dimethylamino)benzoato-O][4-oxo-4-(propylamino)butanoato-O]-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Butanoic acid, 4-oxo-4-(propylamino)-, zirconium complex
MF C20 H28 N2 O9 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



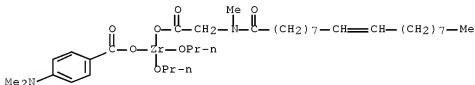
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 29 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110034-97-4 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [4-(dimethylamino)benzoato-O]dihydroxy[4-oxo-4-(propylamino)butanoato-O]-, (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Butanoic acid, 4-oxo-4-(propylamino)-, zirconium complex
MF C16 H24 N2 O7 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

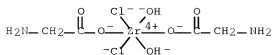
L10 ANSWER 30 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 110034-96-3 REGISTRY
ED Entered STN: 29 Aug 1987
CN Zirconium, [4-(dimethylamino)benzoato-O][N-methyl-N-(1-oxo-9-octadecenyl)glycinato-O]dipropoxy-, [T-4-(Z)]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 4-(dimethylamino)-, zirconium complex
CN Glycine, N-methyl-N-(1-oxo-9-octadecenyl)-, zirconium complex, (Z)-
MF C36 H62 N2 O7 Zr
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 31 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 69650-84-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Zirconate(2-), dichlorobis(glycinato-O)dihydroxy-, dihydrogen (9CI) (CA INDEX NAME)
MF C4 H10 Cl2 N2 O6 Zr . 2 H
CI CCS

LC STN Files: CA, CAPLUS
CRN (782398-18-9)



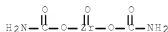
● 2 H⁺

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 32 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 59596-23-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN Zirconium, bis(carbamato-O)oxo-, homopolymer (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Carbamic acid, zirconium complex, homopolymer
MF (C2 H4 N2 O5 Zr)x
CI PMS
PCT Polyether, Polyether only
LC STN Files: CA, CAPLUS

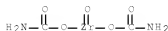
CM 1

CRN 59596-22-4
CMF C2 H4 N2 O5 Zr



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 33 OF 33 REGISTRY COPYRIGHT 2009 ACS on STN
RN 59596-22-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN Zirconium, bis(carbamato-O)oxo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Carbamic acid, zirconium complex
MF C2 H4 N2 O5 Zr
CI COM



| | | |
|--|------------|---------|
| => FILE STNGUIDE | | |
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 254.01 | 686.52 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -6.56 |

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 LAST RELOADED: Sep 25, 2009 (20090925/UP).

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|--|------------|---------|
| => FILE CASLINK | | |
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.49 | 687.01 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -6.56 |

FILE 'CAPLUS' ENTERED AT 22:35:26 ON 28 SEP 2009
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FILE COVERS 1907 - 28 Sep 2009 VOL 151 ISS 14
 FILE LAST UPDATED: 27 Sep 2009 (20090927/ED)
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009

FILE 'MARPAT' ENTERED AT 22:35:26 ON 28 SEP 2009
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FILE CONTENT: 1961-PRESENT VOL 151 ISS 12 (20090925/ED)

FILE 'REGISTRY' ENTERED AT 22:35:26 ON 28 SEP 2009
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STRUCTURE FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6
 DICTIONARY FILE UPDATES: 27 SEP 2009 HIGHEST RN 1186379-81-6
 TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

CLUSTER 'CASLINK' ENTERED

Predefined command sequences will be executed in
 REGISTRY, MARPAT, and CAPLUS.

=>
 Uploading C:\TDH PTA\Application Examination\Series 10\10 588187\STN\STN 10 588187
 092809AD.str

HF—0—AK—N3—1—2—4

chain nodes :
1 2 3 4
chain bonds :
1-2 1-3 2-4
exact/norm bonds :
1-2 2-4
exact bonds :
1-3

G1:H,Ak

G2:Si,Hf

G3:Hf,Zr

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS

L11 STRUCTURE UPLOADED

=> D

L11 HAS NO ANSWERS

L11 STR

Hf-O-Ak-N
G1 H,Ak
G2 Si,Hf
G3 Hf,Zr

Structure attributes must be viewed using STN Express query preparation.

=> S L11 SSS SAM

S L11 SSS SAM FILE=REGISTRY

SAMPLE SEARCH INITIATED 22:35:47 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 142 TO ITERATE

100.0% PROCESSED 142 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 2126 TO 3554

PROJECTED ANSWERS: 0 TO 0

L12 0 SEA SSS SAM L11

1 FILES SEARCHED...

S L12 SSS SAM FILE=MARPAT

SAMPLE SEARCH INITIATED 22:35:47 FILE 'MARPAT'

SAMPLE SCREEN SEARCH COMPLETED - 337 TO ITERATE

100.0% PROCESSED 337 ITERATIONS
SEARCH TIME: 00.00.01

4 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 5646 TO 7834
PROJECTED ANSWERS: 4 TO 200

L13 4 SEA SSS SAM L11
1 FILES SEARCHED...

=> D SCAN

L13 4 ANSWERS MARPAT COPYRIGHT 2009 ACS on STN
CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 63
TI Heterocyclic organic compounds as tyrosine and serine-threonine kinase
protein inhibitors for the treatment of in particular melanoma and their
preparation
ST pyrimidine tetrahydroquinoline prepn tyrosine serine threonine protein
kinase inhibitor; treatment melanoma pyrimidine tetrahydroquinoline prepn
IT EphB receptors
RL: ADV (Adverse effect, including toxicity); BSU (Biological study,
unclassified); BIOL (Biological study)
(EphB4; preparation of heterocyclic organic compds. as tyrosine and
serine-threonine kinase and kinase-like proteins inhibitors useful in
mono- and combination therapy of diseases)
IT Tyrosine kinase receptors
RL: ADV (Adverse effect, including toxicity); BSU (Biological study,
unclassified); BIOL (Biological study)
(Tie-2; preparation of heterocyclic organic compds. as tyrosine and
serine-threonine kinase and kinase-like proteins inhibitors useful in
mono- and combination therapy of diseases)
IT Endocrine system, disease
(agents for treatment of; preparation of heterocyclic organic compds. as
tyrosine and serine-threonine kinase and kinase-like proteins
inhibitors useful in mono- and combination therapy of diseases)
IT Antiarteriosclerotics
(antiatherosclerotics; preparation of heterocyclic organic compds. as
tyrosine
and serine-threonine kinase and kinase-like proteins inhibitors useful
in mono- and combination therapy of diseases)
IT Antitumor agents
(antibiotic; preparation of heterocyclic organic compds. as tyrosine and
serine-threonine kinase and kinase-like proteins inhibitors useful in
mono- and combination therapy of diseases)
IT Mitosis
(antimitotic agents; preparation of heterocyclic organic compds. as tyrosine
and serine-threonine kinase and kinase-like proteins inhibitors useful
in mono- and combination therapy of diseases)
IT Antibiotics
(antitumor; preparation of heterocyclic organic compds. as tyrosine and
serine-threonine kinase and kinase-like proteins inhibitors useful in
mono- and combination therapy of diseases)
IT Nerve, disease
(degeneration, chronic, treatment of; preparation of heterocyclic organic
compds. as tyrosine and serine-threonine kinase and kinase-like
proteins inhibitors useful in mono- and combination therapy of
diseases)
IT Retinal disease

(diabetic retinopathy, treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

- IT Animals
 - (homiothermic; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)
- IT Suspensions
 - (in oil; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)
- IT Epidermal growth factor receptors
 - Vascular endothelial growth factor receptors
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (inhibitors; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)
- IT Proteins
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (kinase-like; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)
- IT Retinal disease
 - (macular degeneration, age-related, treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)
- IT Headache
 - (migraine, treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)
- IT Alkylating agents, biological
 - Analgesics
 - Anti-inflammatory agents
 - Antiandrogens
 - Antiestrogens
 - Antimigraine agents
 - Antitumor agents
 - Aromatase inhibitors
 - Combination chemotherapy
 - Cytotoxic agents
 - Drug targets
 - Human
 - Metabolic pathways
 - Mutation
 - Nervous system agents
 - Neuroprotective agents
 - Oral drug delivery systems
 - Pharmaceutical carriers
 - Pharmaceutical solids
 - Pharmaceutical suppositories
 - Plasticizers
 - Prodrugs
 - Rectal drug delivery systems
 - Signal transduction
 - (preparation of heterocyclic organic compds. as tyrosine and serine-threonine

kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Cyclin dependent kinase inhibitors
 Eph receptors
 Insulin-like growth factor receptors
 c-Kit (protein)
 neu (receptor)
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of heterocyclic organic compds. as tyrosine and serine-threonine

kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Enzymes, biological studies
 Receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of heterocyclic organic compds. as tyrosine and serine-threonine

kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Androgens
 Coordination compounds
 Estrogens
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of heterocyclic organic compds. as tyrosine and serine-threonine

kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Gelatins, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of heterocyclic organic compds. as tyrosine and serine-threonine

kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Disease, animal
 (serine-threonine kinase and kinase-like proteins-dependent; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Injury
 (trauma, neuro-, treatment of; preparation of heterocyclic organic compds.

as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Aging, animal
 Angiogenesis
 Atherosclerosis
 Cardiac hypertrophy
 Inflammation
 Melanoma
 Neoplasm
 Pain
 (treatment of; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT Fibroblast growth factor receptors
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 (type 1; preparation of heterocyclic organic compds. as tyrosine and

serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 950752-46-2P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (drug candidate and intermediate; preparation of heterocyclic organic compds.
 as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 443754-21-0P 950752-36-0P 950752-37-1P 950752-39-3P 950752-40-6P 950752-42-8P 950752-44-0P 950752-47-3P 950752-54-2P 950752-56-4P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug candidate; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 9001-92-7, Proteinase 9039-48-9, Aromatase 9076-57-7 39391-18-9 61229-81-0, Methionine aminopeptidase 62031-54-3, Fibroblast growth factor 140879-24-9, Proteasome 372092-80-3 386705-49-3, Vascular endothelial growth factor receptor kinase
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 52057-92-8P 158661-60-0P, 2-(3-Chlorophenylamino)pyrimidin-4-ol 919836-53-6P 950752-48-4P 950752-51-9P 950752-52-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 9026-43-1 79079-06-4, Her-1 kinase 80449-02-1 88201-45-0, Protein kinase Ins-r 101463-26-7, PDGF-R kinase 137632-09-8, Her-2 kinase 138238-67-2, c-Abl kinase 138359-29-2, c-Kit kinase 139691-76-2, RAF kinase 141349-86-2, CDK2 kinase 141350-03-0, Flt-1 kinase 142243-02-5 144638-77-7, Flt-4 kinase 144697-16-5, B-RAF kinase 144697-17-6, c-Src kinase 146279-92-7, RET kinase 147230-71-5, Flt-3 kinase 148047-29-4, Tek receptor tyrosine kinase 150977-45-0, Kdr kinase 159606-08-3
 RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 9034-40-6, Luteinizing hormone-releasing factor
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 7440-06-4D, Platinum, complexes 51110-01-1D, Somatostatin, analogs
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of heterocyclic organic compds. as tyrosine and serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and

combination therapy of diseases)

IT 69-65-8, D-Mannitol
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of heterocyclic organic compds. as tyrosine and serine-threonine
 kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

IT 108-42-9, 3-Chloroaniline 108-91-8, Cyclohexylamine, reactions
 5751-20-2, 2-Methylsulfanylpurimidin-4-ol 61468-43-7,
 1,2,3,4-Tetrahydroquinolin-5-ol 79668-76-1,
 3-(3-Chloropropoxy)phenylamine 158661-55-3, 2-Phenylaminopyrimidin-4-ol
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; preparation of heterocyclic organic compds. as tyrosine
 and
 serine-threonine kinase and kinase-like proteins inhibitors useful in mono- and combination therapy of diseases)

MSTR. 1



G2 = carbon chain (opt. substd. by (1-5) G7)
 G7 = 36 / 38



G8 = 51 / 53



G9 = 58 / 60



G11 = NH (opt. substd.)

G18 = heteroatom

Patent location:

claim 1

Note: or pharmaceutically acceptable salts, esters, or prodrugs

Note: substitution is restricted

Note: additional heteroatom interruptions also claimed

Note: also incorporates claim 78

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L13 4 ANSWERS MARPAT COPYRIGHT 2009 ACS on STN

IC ICM A61L017-00

CC 63-7 (Pharmaceuticals)

TI surface coating of surgical filaments with acylamino acid polyvalent salts to improve smoothness

ST surgical filament coating acylamino acid salt; suture surface coating acylamino acid salt

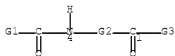
IT Medical goods
(filaments; surface coating of surgical filaments with acylamino acid polyvalent salts to improve smoothness)

IT Amino acids, biological studies
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(acyl, polyvalent salts; surface coating of surgical filaments with acylamino acid polyvalent salts to improve smoothness)

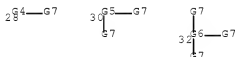
IT Medical goods
(sutures, surface coating of surgical filaments with acylamino acid polyvalent salts to improve smoothness)

IT 1592-23-0, Calcium stearate 138523-38-3 138647-44-6 138705-28-9
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(surface coating of surgical filaments with acylamino acid polyvalent salts to improve smoothness)

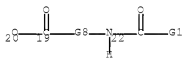
MASTR 1B



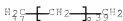
G3 = 28 / 30 / 32



G4 = metal
G7 = 20



G8 = 37-19 39-22



Patent location: claim 1

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> S L11 SSS FULL

S L11 SSS FUL FILE=REGISTRY
FULL SEARCH INITIATED 22:36:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2655 TO ITERATE

100.0% PROCESSED 2655 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L14 0 SEA SSS FUL L11
1 FILES SEARCHED...

S L14 SSS FUL FILE=MARPAT
FULL SEARCH INITIATED 22:36:40 FILE 'MARPAT'
FULL SCREEN SEARCH COMPLETED - 6568 TO ITERATE

100.0% PROCESSED 6568 ITERATIONS 31 ANSWERS
SEARCH TIME: 00.00.01

L15 31 SEA SSS FUL L11
1 FILES SEARCHED...

S L14 FILE=CAPLUS
L16 0 FILE CAPLUS
1 FILES SEARCHED...

SET DUPORDER FILE
SET COMMAND COMPLETED

DUP REM L15 L16
L16 HAS NO ANSWERS
PROCESSING COMPLETED FOR L15
PROCESSING COMPLETED FOR L16
L17 31 DUP REM L15 L16 (0 DUPLICATES REMOVED)
ANSWERS '1-31' FROM FILE MARPAT

=> D L17 1-31 IBIB ABS FHIT

L17 ANSWER 1 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 150:37495 MARPAT Full-text
TITLE: Preparation of products containing monomer and
polymers of titanlys
INVENTOR(S): Litz, Kyle E.; Dutta, Partha; Lewis, Sarah; Rossetti,
Mark; Pawlson, James; Ullman, Timothy; Amaratunga,
Giyana; Vreeland, Jennifer M.; Jordan, Tracey M.
PATENT ASSIGNEE(S): Applied Nano Works, Inc., USA
SOURCE: PCT Int. Appl., 65pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2008153633 | A2 | 20081218 | WO 2008-US5624 | 20080502 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, | | | | |

CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
 FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
 KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
 ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
 PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
 IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

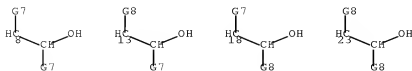
PRIORITY APPLN. INFO.: US 2007-924214P 20070503
 US 2007-917171P 20070510
 US 2008-39619P 20080326

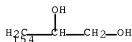
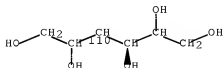
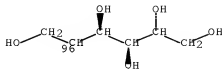
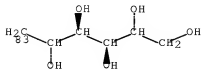
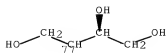
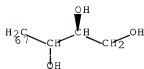
AB A compd. having the general formula (I) $MmOm(OR_2)_n$ is prepd., wherein M is Ti, Zr, or Hf; R₂ at each occurrence is individually a substituted alkyl, cycloalkyl, cycloalkylalkyl, heterocyclyl, or heterocyclylalkyl group containing at least one OH group, and m and n are integers from 1 to 8. The compound is bis(ethylene glycol)oxotitanium(IV), bis(glycerol)oxotitanium(IV), bis(erythritol)oxotitanium(IV), or bis(sorbitol)oxotitanium(IV). The compds. of formula I are prepared by reacting a compound of formula MOX_2 with X being a halide with a hydroxy group-containing reagent, such as alcs., polyols, sugars, and starches. The compds. have a visible wavelength range transmittance of at least 90% and an UV light transmittance of $\leq 20\%$ in a wavelength range below about 400 nm. Such compds. form optically transparent and/or clear films or particles or may be used to prepare such materials. Nanoparticles are prepared by hydrolyzing the compound to form a polyoxotitanate-containing hydrosylate. The hydrosylate can be calcined to prepare titania or zirconia. The nanoparticles can be doped into a polymer to adjust the refractive index of the polymer. The polyoxotitanate nanoparticles can be used in coating compns. The compds. of formula I can be used as esterification catalysts, transesterification catalysts, crosslinkers, or for the oxidative desulfurization of fuels.

MSSTR 1

G13

G1 = Ti / Zr / Hf
 G2 = alkyl <containing 1-12 C> (substd. by G3) /
 cycloalkyl (substd. by G3) / alkyl <containing 1-12 C>
 (substd. by G4) / heterocycle <containing 1 or more
 heteroatoms, zero or more N, zero or more O, zero or more S>
 (substd. by G3) / alkyl <containing 1-12 C> (substd. by G6) /
 {Specifically claimed: 8 / 13 / 18 / 23 / 67 / 77 / 83 / 96 /
 110} / (Examples: 154 / 176)





- G3 = R / 1 or more OH
 G4 = 1 or more cycloalkyl (opt. substd. by G5) / R / OH
 G5 = R / OH
 G6 = 1 or more heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd. by G5) / R / OH
 G7 = H / F / Cl / Br / I / OH / 27 / NH2 / cycloalkyl (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd.)

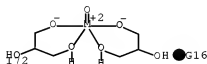
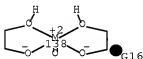
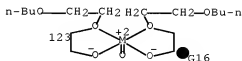
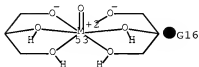
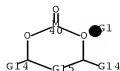
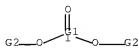
2910—G11

- G8 = CN / alkyl <containing 1-12 C> (opt. substd. by G12)
 G10 = O / NH / 29

28—G11

- G11 = alkyl <containing 1-12 C> (opt. substd. by G12) / cycloalkyl (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd.)
 G12 = R / cycloalkyl (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S> (opt. substd.)

G13 = 32 / 1 / 40 / (Specifically claimed: 53) /
(Examples: 123 / 138 / 172)



G14 = H / F / Cl / Br / I / OH / 181 / NH2 /
cycloalkyl (opt. substd.) / heterocycle <containing 1 or
more heteroatoms, zero or more N, zero or more O,
zero or more S> (opt. substd.) / CN /
alkyl <containing 1-12 C> (opt. substd. by G12)



G15 = (1-4) 44



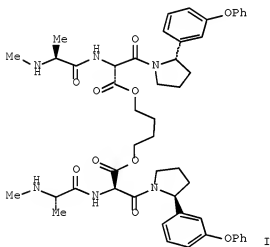
G16 = Ti
Patent location: claim 1
Note: or complexes with G1

L17 ANSWER 2 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 148:215329 MARPAT Full-text
TITLE: Dimeric Smac peptidomimetics as IAP (inhibitor of
apoptosis protein) inhibitors, and their therapeutic
use
INVENTOR(S): Condon, Stephen M.
PATENT ASSIGNEE(S): Tetralogic Pharmaceuticals Corporation, USA
SOURCE: PCT Int. Appl., 92pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NO. COUNT: 1
 PATENT INFORMATION:

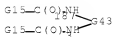
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2008014236 | A1 | 20080131 | WO 2007-US74181 | 20070724 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |

PRIORITY APPLN. INFO.: US 2006-820169P 20060724
 GI



AB The invention is related to homodimers or heterodimers contg. monomeric units of formula $R_1R_2NCHR_3CONHCHR_4COUR_5$ [each R_1 , R_2 = independently H, (un)substituted alk(en/yn)yl, cycloalkyl; each R_3 = independently H, CF_3 , alk(en/yn)yl, CH_2Z ; each Z = independently H, OH, F, Cl, CH_2F , etc.; each R_4 = independently straight or branched alkyl, cycloalkyl, alkenyl, aryl, etc.; U = substituted 1,2-cyclopentylene, 1,2-pyrrolidinylene; R_5 = independently H, alkyl, aryl, indanyl, etc.; or R_5 = a residue of an amino acid], particularly to Smac peptidomimetics, e.g. I, and their pharmaceutically acceptable salts and hydrates, compns. containing them and methods of using them to modulate apoptosis including IAP antagonists. Compns. including mimetics of the invention and, optionally, secondary agents, may be used to treat proliferative disorders such as, cancer and autoimmune diseases.

MSTR 1



G1 = NH / 14



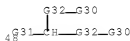
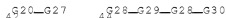
- G2 = alkyl <containing 1-4 C> (opt. substd.) /
alkenyl <containing 2-4 C> (opt. substd.) /
alkynyl <containing 2-4 C> (opt. substd.) /
cycloalkyl <containing 3-10 C> (opt. substd.) /
(Specifically claimed: Me)
- G3 = H / CF₃ / alkyl <containing 1-4 C> /
alkenyl <containing 2-4 C> / alkynyl <containing 2-4 C> /
16 / 18 / (Specifically claimed: Me)

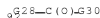


- G4 = alkyl <containing 1-16 C> /
alkenyl <containing 2-16 C> / alkynyl <containing 2-16 C> /
cycloalkyl <containing 2-10 C> /
aryl <containing 6-14 C> (opt. substd.) /
heterocycle <containing 5-12 atoms, 1-4 heteroatoms,
zero or more N, zero or more O,
zero or more S (no other heteroatoms)> (opt. substd.) / 20 /
29



- G5 = H / alkyl <containing 1-10 C> /
aryl <containing 6-14 C> / Ph /
cycloalkyl <containing 3-7 C> / 42 /
alkyl <containing 1-10 C> (substd. by 1 or more aryl
<containing 6-14 C> (opt. substd.)) / 44 / 48 / 56 / 66 /
77 / 87 / 90 / 92 / 95 / R <"amino acid residue">





- G6 = H / R
 G7 = CH / N
 G8 = H / carbon chain (opt. substd.)
 G9 = 118-153 119-7 / 120-153 122-7



- G10 = Me / CF3 / CH2OH / 38



- G11 = NH / 34



- G12 = alkyl <containing 1-4 C> (opt. substd.) /
 cycloalkyl <containing 3-7 C> (opt. substd.) /
 Ph (opt. substd.) / 40



- G15 = 10 / heterocycle <containing 5-14 atoms,
 1 or more heteroatoms, 1 or more N, zero or more O,
 zero or more S (no other heteroatoms), 1-3 rings>
 (opt. substd. by (1) G2)



- G16 = 153-200 107-7 / heterocycle <containing 6 or more
 atoms, 1 or more heteroatoms, 1 or more N, zero or more O,
 zero or more S (no other heteroatoms), polycyclic,
 1 or more 5-membered rings> (opt. substd.) /
 carbocycle <containing 6 or more C, polycyclic,
 1 or more 5-membered rings> (opt. substd.)



G17 = NH2 / 12

~~1~~¹G1—G2

G18 = (1-2) CH2

G19 = H / OH / F / Cl

G20 = (1-6) CH2

G21 = aryl <containing 6-14 C> (opt. substd.) /
heterocycle <containing 5-12 atoms, 1-4 heteroatoms,
zero or more N, zero or more O,
zero or more S (no other heteroatoms)> (opt. substd.) / 22

~~2~~²G22—C(O)—G23

G22 = NH / 25 / O

~~2~~⁸G—G10

G23 = alkyl <containing 1-10 C> (opt. substd.) /
Ph (opt. substd.) / 27

~~2~~⁴G20—G24

G24 = cycloalkyl <containing 3-7 C> (opt. substd.) /
Ph (opt. substd.) / heterocycle <containing 5-12 atoms,
1-4 heteroatoms, zero or more N, zero or more O,
zero or more S (no other heteroatoms)>

G25 = NH2 / 32 / 36 / heterocycle <containing 5-12 atoms,
1-4 heteroatoms, zero or more N, zero or more O,
zero or more S (no other heteroatoms),
attached through 1 or more N>

~~3~~¹G11—G12 ~~3~~⁸G—G23

G26 = cycloalkyl <containing 3-7 C> (opt. substd.) /
Ph (opt. substd.)

G27 = cycloalkyl <containing 3-7 C> (opt. substd.)

G28 = (0-6) CH2

G29 = cycloalkylene <containing 3-7 C> (opt. substd.)

G30 = Ph (opt. substd.)

G31 = alkylene <containing 1-4 C> / bond

G32 = alkylene <containing 1-4 C>

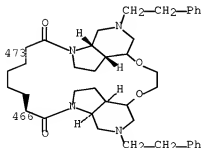
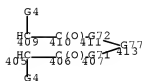
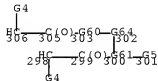
G33 = heterocycle <containing 5-12 atoms,
1-4 heteroatoms, zero or more N, zero or more O,
zero or more S (no other heteroatoms)>

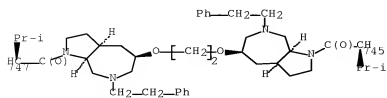
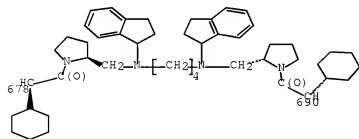
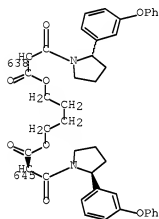
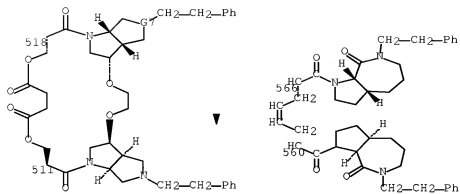
G34 = alkylene (opt. substd.) /
(Specifically claimed: C(O))

- G35 = NH (opt. substd.) / O / S / S(O) / SO2
 G36 = arylene <containing 6-14 C> (opt. substd.) /
 heterocycle <containing 5-12 atoms, 1-4 heteroatoms,
 zero or more N, zero or more O,
 zero or more S (no other heteroatoms)>
 G37 = C(O) / CF2 / O / S / S(O) / SO2 /
 arylene <containing 6-14 C> (opt. substd.) /
 alkylene <containing 1-8 C> (opt. substd.) /
 heterocycle <containing 5 atoms, 2 heteroatoms, 2 O,
 saturated, 5-membered monocyclic ring> / NH (opt. substd.)
 G38 = 97-200 101-107 / heterocycle <containing 6 or more
 atoms, 1 or more heteroatoms, 1 or more N, zero or more O,
 zero or more S (no other heteroatoms), polycyclic,
 1 or more 5-membered rings> (opt. substd.) /
 carbocycle <containing 6 or more C, polycyclic,
 1 or more 5-membered rings> (opt. substd.)



- G43 = 290 / 298-3 306-187 / 409-187 405-3 / 458 / 461 /
 (Specifically claimed: 473-187 466-3 / 518-187 511-3 /
 566-187 560-3 / 638-187 645-3 / 678-187 690-3 /
 747-187 745-3)





G44 = R <"linker"> / carbon chain <containing 1 or more C, 0 or more double bonds, 0 or more triple bonds> (opt. substd.) / carbocycle (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)> (opt. substd.) / 190-4 191-189 / 192-4 193-189 / 194-4 196-189 / 197-4 199-189 / heteroatom

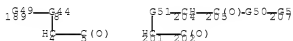


G45 = carbon chain <containing 1 or more C, 0 or more double bonds, 0 or more triple bonds> / carbocycle (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)> (opt. substd.) / heteroatom

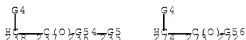
G46 = carbocycle (opt. substd.) / heterocycle <containing 1 or more heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms)> (opt. substd.) / heteroatom

G47 = carbon chain <containing 1 or more C, 0 or more double bonds, 0 or more triple bonds> (opt. substd.)

G48 = 4-3 189-187 5-6 / 201-3 202-6 204-187



G49 = 236-8 238-187 / 274-187 272-8



G50 = 219-205 218-207 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)



G51 = R <"linker"> / carbon chain <containing 1 or more C, 0 or more double bonds, 0 or more triple bonds>

(opt. substd.) / carbocycle (opt. substd.) /
heterocycle <containing 1 or more heteroatoms,
zero or more N, zero or more O,
zero or more S (no other heteroatoms)> (opt. substd.) /
208-201 209-204 / 210-201 211-204 / 212-201 214-204 /
215-201 217-204 / heteroatom



G52 = 220-205 224-218 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)



G53 = 230-219 231-207 / 232-219 234-207



G54 = 241-237 240-235 241-8 /
heterocycle <containing 6 or more atoms,
1 or more heteroatoms, 1 or more N, zero or more O,
zero or more S (no other heteroatoms), polycyclic,
1 or more 5-membered rings> (opt. substd.) /
carbocycle <containing 6 or more C, polycyclic,
1 or more 5-membered rings> (opt. substd.)



G55 = 242-237 246-240 243-8 / 252-237 256-240 254-8 /
262-237 266-240 265-8 / heterocycle <containing 6 or more
atoms, 1 or more heteroatoms, 1 or more N, zero or more O,
zero or more S (no other heteroatoms), polycyclic,
1 or more 5-membered rings> (opt. substd.) /
carbocycle <containing 6 or more C, polycyclic,
1 or more 5-membered rings> (opt. substd.)



G56 = 277-273 276-8 / heterocycle <containing 6 or more

atoms, 1 or more heteroatoms, 1 or more N, zero or more O,
zero or more S (no other heteroatoms), polycyclic,
1 or more 5-membered rings> (opt. substd.) /
carbocycle <containing 6 or more C, polycyclic,
1 or more 5-membered rings> (opt. substd.)

~~2957-2968~~

G57 = 278-273 282-276 / heterocycle <containing 6 or
more atoms, 1 or more heteroatoms, 1 or more N,
zero or more O, zero or more S (no other heteroatoms),
polycyclic, 1 or more 5-membered rings> (opt. substd.) /
carbocycle <containing 6 or more C, polycyclic,
1 or more 5-membered rings> (opt. substd.)



G58 = 288-277 289-8 / 290-277 292-8

~~2934-2935~~ ~~2936-2937-2936~~

G59 = 293-241 294-235 / 295-241 297-235

~~2934-2935~~ ~~2936-2937-2936~~

G60 = 352 / 357-305 356-302 /
heterocycle <containing 6 or more atoms,
1 or more heteroatoms, 1 or more N, zero or more O,
zero or more S (no other heteroatoms), polycyclic,
1 or more 5-membered rings> (opt. substd.) /
carbocycle <containing 6 or more C, polycyclic,
1 or more 5-membered rings> (opt. substd.)

~~3555-355~~ ~~3559-3560~~

G61 = 309-299 308-301 309-302 /
heterocycle <containing 6 or more atoms,
1 or more heteroatoms, 1 or more N, zero or more O,
zero or more S (no other heteroatoms), polycyclic,
1 or more 5-membered rings> (opt. substd.) /
carbocycle <containing 6 or more C, polycyclic,
1 or more 5-membered rings> (opt. substd.)

~~3552-3563~~

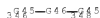
G62 = 310-299 314-308 311-302 /
 319-299 323-308 321-302 / 328-299 332-308 331-302 /
 heterocycle <containing 6 or more atoms,
 1 or more heteroatoms, 1 or more N, zero or more O,
 zero or more S (no other heteroatoms), polycyclic,
 1 or more 5-membered rings> (opt. substd.) /
 carbocycle <containing 6 or more C, polycyclic,
 1 or more 5-membered rings> (opt. substd.)



G63 = 337-309 338-301 / 339-309 341-301



G64 = R <"linker"> / carbon chain <containing 1 or more
 C, 0 or more double bonds, 0 or more triple bonds>
 (opt. substd.) / carbocycle (opt. substd.) /
 heterocycle <containing 1 or more heteroatoms,
 zero or more N, zero or more O,
 zero or more S (no other heteroatoms)> (opt. substd.) /
 342-303 343-300 / 344-303 345-300 / 346-303 348-300 /
 349-303 351-300 / heteroatom



G65 = 355-305 354-353 355-302 /
 heterocycle <containing 6 or more atoms,
 1 or more heteroatoms, 1 or more N, zero or more O,
 zero or more S (no other heteroatoms), polycyclic,
 1 or more 5-membered rings> (opt. substd.) /
 carbocycle <containing 6 or more C, polycyclic,
 1 or more 5-membered rings> (opt. substd.)



G67 = 358-305 362-354 359-302 /
 367-305 371-354 369-302 / 376-305 380-354 379-302 /
 heterocycle <containing 6 or more atoms,
 1 or more heteroatoms, 1 or more N, zero or more O,
 zero or more S (no other heteroatoms), polycyclic,
 1 or more 5-membered rings> (opt. substd.) /
 carbocycle <containing 6 or more C, polycyclic,
 1 or more 5-membered rings> (opt. substd.)



G68 = 385-355 386-353 / 387-355 389-353



G69 = 390-305 394-356 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)



G70 = 400-357 401-302 / 402-357 404-302



G71 = 415-406 414-413 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)



G72 = 417-410 416-413 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) / carbocycle <containing 6 or more C, polycyclic, 1 or more 5-membered rings> (opt. substd.)



G73 = 418-406 422-414 / heterocycle <containing 6 or more atoms, 1 or more heteroatoms, 1 or more N, zero or more O, zero or more S (no other heteroatoms), polycyclic, 1 or more 5-membered rings> (opt. substd.) /

carbocycle <containing 6 or more C, polycyclic,
1 or more 5-membered rings> (opt. substd.)



G74 = 428-415 429-413 / 430-415 432-413



G75 = 433-410 437-416 / heterocycle <containing 6 or
more atoms, 1 or more heteroatoms, 1 or more N,
zero or more O, zero or more S (no other heteroatoms),
polycyclic, 1 or more 5-membered rings> (opt. substd.) /
carbocycle <containing 6 or more C, polycyclic,
1 or more 5-membered rings> (opt. substd.)



G76 = 443-417 444-413 / 445-417 447-413



G77 = R <"linker"> / carbon chain <containing 1 or more
C, 0 or more double bonds, 0 or more triple bonds>
(opt. substd.) / carbocycle (opt. substd.) /
heterocycle <containing 1 or more heteroatoms,
zero or more N, zero or more O,
zero or more S (no other heteroatoms)> (opt. substd.) /
448-411 449-407 / 450-411 451-407 / 452-411 454-407 /
455-411 457-407 / heteroatom



G78 = any ring <containing 18 or more atoms,
zero or more heteroatoms, zero or more N, zero or more O,
zero or more S (no other heteroatoms), 3 or more rings,
2 or more 5-membered rings> (opt. substd. by 2 or more G80)
G79 = any ring <containing 18 or more atoms,
zero or more heteroatoms, zero or more N, zero or more O,
zero or more S (no other heteroatoms), 3 or more rings,
2 or more 5-membered rings> (opt. substd.)
G80 = CONH2 (opt. substd.) / R

Patent location: claim 2

Note: or pharmaceutically acceptable salts or hydrates
Note: additional derivatization also claimed

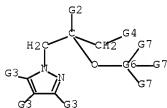
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 3 OF 31 MARPAT COPYRIGHT 2009 ACS ON STN
ACCESSION NUMBER: 149:308294 MARPAT Full-text
TITLE: Precatalysts useful in polyolefin polymerization
reactions
INVENTOR(S): Ladipo, Omofolami Tesileem; Eaves, Richard; Zazybin,
Alexey; Parkin, Sean
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 17pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| US 20080207853 | A1 | 20080828 | US 2007-710174 | 20070223 |
| PRIORITY APPLN. INFO.: | | | US 2007-710174 | 20070223 |

AB Pyrazole compds. are provided that are useful as precatalysts in the
polymerization of olefins such as ethylene and propylene. Other compds. are
useful as intermediates in the production of such precatalysts.

MSTR 8A



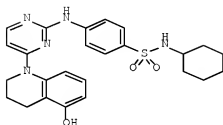
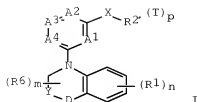
G2 = H / alkyl / alkenyl / alkynyl / cycloalkyl /
cycloalkenyl / alkoxy / aryl / SiH3 (opt. substd.) / halo
G3 = H / alkyl / alkenyl / alkynyl / cycloalkyl /
cycloalkenyl / alkoxy / aryl / SiH3 (opt. substd.) / halo
G4 = NH2 / 21 / 24



G5 = alkyl / alkenyl / alkynyl / cycloalkyl /
cycloalkenyl / alkoxy / aryl / SiH3 (opt. substd.) / halo
G6 = Ti / Zr / Hf
G7 = R <"monodentate ligand">
Patent location: claim 6

L17 ANSWER 4 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 147:406835 MARPAT Full-text
 TITLE: Heterocyclic organic compounds as tyrosine and
 serine-threonine kinase protein inhibitors for the
 treatment of in particular melanoma and their
 preparation
 INVENTOR(S): Batt, David Bryant; Beerli, Rene; Bold, Guido;
 Caravatti, Giorgio; Ramsey, Timothy Michael
 PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH
 SOURCE: PCT Int. Appl., 55pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|------------|-----------------|----------|
| ----- | --- | ----- | ----- | ----- |
| WO 2007109045 | A1 | 20070927 | WO 2007-US6424 | 20070314 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| AU 2007227602 | A1 | 20070927 | AU 2007-227602 | 20070314 |
| CA 2644356 | A1 | 20070927 | CA 2007-2644356 | 20070314 |
| EP 2001864 | A1 | 20081217 | EP 2007-753076 | 20070314 |
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| JP 2009530288 | T | 20090827 | JP 2009-500458 | 20070314 |
| IN 2008DN07259 | A | 20081003 | IN 2008-DN7259 | 20080826 |
| MX 2008011661 | A | 20080922 | MX 2008-11661 | 20080911 |
| KR 2009052301 | A | 20090525 | KR 2008-722399 | 20080912 |
| US 20090069360 | A1 | 20090312 | US 2008-293257 | 20080916 |
| PRIORITY APPLN. INFO.: | | | US 2006-783175P | 20060316 |
| | | | WO 2007-US6424 | 20070314 |
| OTHER SOURCE(S): | CASREACT | 147:406835 | | |
| GI | | | | |



II

AB The invention relates to the discovery that certain compds. of formula I inhibit, regulate and/or modulate tyrosine and serine/threonine kinase and kinase-like proteins, such as RAF kinase, a serine/threonine kinase that functions in the MAP kinase signaling pathway, and is concerned with compns. which contain these compds., and methods of using them to treat tyrosine and serine/threonine kinase and kinase-like dependent diseases, such as angiogenesis, cancer and cardiac hypertrophy. Compds. of formula I wherein A1, A2, A3 and A4 are independently N, CH and substituted C, where at least one of A1-A4 is N; X is NH and derivs., O, and S; R1 is substituted aryl; n is 0 - 4; Y and D are independently O, S, CH2, NH and derivs. and substituted methylene; R6 is a substituted ring which contains Y and D; m is 0 to the maximum number of valencies of the ring; R2 is (un)substituted hydrocarbyl and (un)substituted heterocyclic; T is H, halo, alkoxy, SH and derivs., SO2H and derivs., etc.; and their pharmaceutically acceptable salts, esters and prodrugs thereof, are claimed. Example compound II was prepared by a general procedure (procedure given). All the invention compds. were evaluated for their tyrosine and serine-threonine kinase and kinase-like protein inhibitory activity.

MSR 1

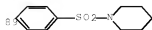


G1 = H / aryl (opt. substd.) /
heteroaryl (opt. substd.) / 25 / R /
(Specifically claimed: OH / 72 / SH / F / Cl / Br / I /
NH2 (opt. substd.) / CF3 / alkyl <containing 1-4 C>
(opt. substd.) / R <"heteroalkyl"> / 79 / 81)

2G12—G13 7G21—G22 7G18—G23 8G24—G18—G23

G2 = carbon chain (opt. substd. by (i-b) G7) /

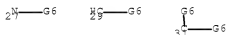
carbocycle (opt. substd. by (1-5) G7) /
heterocycle <containing up to 16 atoms, zero or more N,
zero or more O, zero or more S> (opt. substd. by (1-5) G7) /
(Specifically claimed: 89 / Ph (opt. substd. by (1-5) G7) /
imidazolyl (opt. substd.) / pyrrolyl (opt. substd.) /
oxazolyl (opt. substd.) / isoxazolyl (opt. substd.)



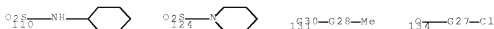
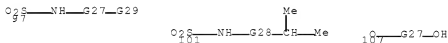
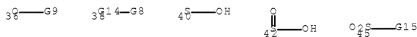
G3 = H / carbon chain (opt. substd.) /
carbocycle (opt. substd.) / R
G4 = N / 19



G5 = O / S / CH2 / 29 / 31 / 27



G6 = H / R
G7 = carbon chain (opt. substd.) /
carbocycle (opt. substd.) / heterocycle <containing up to 16
atoms, zero or more N, zero or more O, zero or more S>
(opt. substd.) / F / Cl / Br / I / 36 / SH / 38 /
40 / 42 /
45 / (Specifically claimed: 97 / 101 / 107 / 110 / 124 /
131 / 134)



G8 = alkyl (opt. substd. by 1 or more G26) /
R <"heteroalkyl"> / 51 / 53 / cycloalkyl (opt.
substd.) /

heterocycle <containing up to 16 atoms, zero or more N,
zero or more O, zero or more S> (opt. substd.) /
aryl (opt. substd.) / heteroaryl (opt. substd.) / 56 /
(Specifically claimed: alkoxy (opt. substd.) /
alkylamino (opt. substd.))

5^q18—G19 5^q20—G18—G19 5^q12—G13

G9 = alkyl (opt. substd. by 1 or more G25) /
R <"heteroalkyl"> / 58 / 60 / cycloalkyl (opt.
substd.) /
aryl (opt. substd.) / heteroaryl (opt. substd.) / 63

5^q18—G19 6^q20—G18—G19 6^q12—G13

G11 = NH (opt. substd.) / O / S
G12 = R / (Examples: O / CH2)
G13 = aryl (opt. substd.) / heteroaryl (opt. substd.)
G14 = S / S(O) / SO2
G15 = NH2 / 47 / F / Cl / Br / I /
heterocycle <containing 1 or more N,
attached through 1 or more N> (opt. substd.) /
alkyl (opt. substd.) / R <"heteroalkyl"> / 137 / 139 /
cycloalkyl (opt. substd.) / heterocycle <containing up to 16
atoms, zero or more N, zero or more O, zero or more S>
(opt. substd.) / aryl (opt. substd.) /
heteroaryl (opt. substd.) / 142 /
heterocycle <containing 1 or more heteroatoms,
zero or more N, zero or more O, zero or more S>
(opt. substd.)

4^q16—G17 1^q18—G19 1^q20—G18—G19 1^q12—G13

G16 = NH / 49

4^q8—G17

G17 = alkyl (opt. substd.) / R <"heteroalkyl"> / 65 / 67 /
cycloalkyl (opt. substd.) / heterocycle <containing up to 16
atoms, zero or more N, zero or more O, zero or more S>
(opt. substd.) / aryl (opt. substd.) /
heteroaryl (opt. substd.) / 70 /
heterocycle <containing 1 or more heteroatoms,
zero or more N, zero or more O, zero or more S>
(opt. substd.)

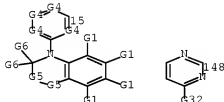
6^q18—G19 6^q20—G18—G19 7^q12—G13

G18 = heteroatom / R <"heteroatom"> / (Example: O)

G19 = alkyl (opt. substd.)
 G20 = alkylene (opt. substd.)
 G21 = O / S
 G22 = alkyl (opt. substd.) / R <"heteroalkyl"> / 74 / 76

$\gamma\text{G18}=\text{G19}$ $\gamma\text{G20}=\text{G18}=\text{G19}$

G23 = alkyl <containing 1-4 C> (opt. substd.)
 G24 = alkylene <containing 1-4 C> (opt. substd.)
 G25 = R / (Specifically claimed: F / Cl / Br / I)
 G26 = R / (Specifically claimed: F / Cl / Br / I / CO2H)
 G27 = (1-4) CH2
 G28 = (0-4) CH2
 G29 = CO2H / OH / NMe2
 G30 = SO2 / S
 G31 = 15 / 148



G32 = OH / Cl

Patent location:

Note:

claim 1

or pharmaceutically acceptable salts, esters, or prodrugs

Note:

substitution is restricted

Note:

additional heteroatom interruptions also claimed

Note:

also incorporates claim 78

REFERENCE COUNT:

11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 5 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

147:47309 MARPAT [Full-text](#)

TITLE:

1,2,4-Triazolidine-3-thione derivatives as medical and agrochemical fungicides

INVENTOR(S):

Eschrich, Dietmar; Recktenwald, Juergen; Entian, Karl-Dieter

PATENT ASSIGNEE(S):

Phenion G.m.b.H. & Co. K.-G., Germany

SOURCE:

PCT Int. Appl., 66pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2007068422 | A1 | 20070621 | WO 2006-EP11897 | 20061211 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, | | | | |

GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
 KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
 MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
 RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
 TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

DE 102005059279 A1 20070628

DE 2005-10200505927920051212

EP 1959736 A1 20080827

EP 2006-829487 20061211

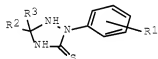
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

PRIORITY APPLN. INFO.:

DE 2005-10200505927920051212

WO 2006-EP11897 20061211

GI



I

AB 1,2,4-Triazolidine-3-thione derivs. I [R1 = H, OH, CO2H, SH, NH2, NO, NO2,
 (un)substituted alkyl, alkenyl, alkynyl, hetroalkyl, etc.; R2, R3 = H, OH,
 alkoxy, Co2H, (un)substituted alkyl, aryl, etc.; R2CR3 = ring] are agrochem.
 and medical fungicides. The preparation of I is outlined.

MSTP 2

G2=G13

G1 = H / OH / 20 / carbon chain <containing 1-20 C,
 0 or more double bonds, 0 or more triple bonds>
 (opt. substd. by G5) / any ring <containing 3-20 atoms,
 zero or more N, zero or more O, zero or more S>
 (opt. substd. by G8) / R / 28 / CHO / 30 / CH3 / 32 / SH /
 37 / 39 / SO3H / 41 / NH2 / 44 / NHH2 / NO2 / 48 / F / Cl /
 Br / I / 54 / (Specifically claimed: Me)

2G10-G4

2G5-G7

3G(O)-G4



3G-OH

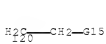
3G-OH



G2 = any ring <attached through 1 C> / 56 /
(Specifically claimed: 67 / 75 / 78)



```
G3      = H / OH / 85 / carbon chain <containing 1-20 C,  
        0 or more double bonds, 0 or more triple bonds>  
        (opt. substd. by G5) / any ring <containing 3-20 atoms,  
        zero or more N, zero or more O, zero or more S>  
        (opt. substd. by G8) / 87 / CHO / 89 / CH3 / 91 / SH / 95 /  
        97 / SO3H / 99 / NH2 / 102 / NNNH2 / NO2 / 104 / F / Cl /  
        Br / I / 110 / R <"protected group"> /  
        (Specifically claimed: Me / 58 / 120 / Bu-n / pentyl / Pr-n /  
        Ph / 2-thienyl)
```



```
G4      = carbon chain <containing 1-20 C,  
         0 or more double bonds, 0 or more triple bonds>  
         (opt. substd. by G5) / any ring <containing 3-20 atoms,  
         zero or more N, zero or more O, zero or more S>  
         (opt. substd. by G8) / R / 26
```



G5 = heteroatom / OH / SH / NH2 / R / 24 /
any ring <containing 3-20 atoms, zero or more N,
zero or more O, zero or more S>

286—G7

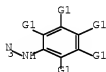
G6 = heteroatom / O / S / NH
 G7 = carbon chain <containing 1-20 C,
 0 or more double bonds, 0 or more triple bonds> /
 any ring <containing 3-20 atoms, zero or more N,
 zero or more O, zero or more S>
 G8 = carbon chain <containing 1-20 C,
 0 or more double bonds, 0 or more triple bonds> /
 any ring <containing 3-20 atoms, zero or more N,
 zero or more O, zero or more S> / heteroatom / OH / SH /
 NH2 / R / 22

286—G7

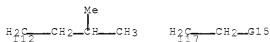
G9 = H / R
 G10 = O / S / S(O) / SO2 / NH / 46

48—G4

G11 = NH / O
 G12 = H / F / Cl / Br / I
 G13 = O / 3



G14 = H / R <"protected group"> /
 (Specifically claimed: Me / 112 / 117 / Bu-n / pentyl /
 Pr-n / Ph / 2-thienyl)



G15 = H / Ph
 Patent location: claim 1
 Note: incorporates formulae II, IV, IIa, and IVa
 Note: substitution is restricted
 Note: additional substitution also claimed

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 6 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 146:100433 MARPAT Full-text

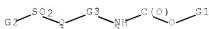
TITLE: Process for the production of
(alkoxycarbonylamino)alkyl sulfonates
INVENTOR(S): Cladingboel, David; Herring, Adam; Sinclair, Rhona
PATENT ASSIGNEE(S): AstraZeneca AB, Swed.
SOURCE: PCT Int. Appl., 25pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|----------|
| WO 2006137774 | A1 | 20061228 | WO 2006-SE694 | 20060612 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| AU 2006259941 | A1 | 20061228 | AU 2006-259941 | 20060612 |
| CA 2610205 | A1 | 20061228 | CA 2006-2610205 | 20060612 |
| EP 1896402 | A1 | 20080312 | EP 2006-747887 | 20060612 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR | | | |
| JP 2008546765 | T | 20081225 | JP 2008-518073 | 20060612 |
| NO 2007006088 | A | 20080118 | NO 2007-6088 | 20071127 |
| MX 2007016093 | A | 20080310 | MX 2007-16093 | 20071214 |
| IN 2007DN09686 | A | 20080620 | IN 2007-DN9686 | 20071214 |
| CN 101268040 | A | 20080917 | CN 2006-80021951 | 20071219 |
| KR 2008016933 | A | 20080222 | KR 2008-700124 | 20080103 |
| PRIORITY APPLN. INFO.: | | | SE 2005-1429 | 20050620 |
| | | | SE 2005-2770 | 20051215 |
| | | | WO 2006-SE694 | 20060612 |

OTHER SOURCE(S): CASREACT 146:100433

AB A process for the prodn. of (alkoxycarbonylamino)alkyl sulfonates [e.g., 2-(tert-butylloxycarbonylamino)ethyl 2,4,6-trimethylbenzenesulfonate] is presented.

MSTR 1



G1 = carbon chain <containing 1-6 C>
(opt. substd. by 1 or more G7) /
carbocycle <containing 3-6 C> (opt. substd. by 1 or more G7)
/ 14 / 16 / heterocycle <containing 3-6 atoms,
1 or more heteroatoms, zero or more O, zero or more S>
(opt. substd. by 1 or more G7) / aryl (opt. substd.) /

carbocycle (opt. substd.) / heterocycle <containing 4-14 atoms, 1 or more heteroatoms, zero or more N, zero or more O, zero or more S (no other heteroatoms), mono- or polycyclic> (opt. substd. by 1 or more G9) / R / (Specifically claimed: Bu-t)

$1G4 \text{---} G8$

$1G8 \text{---} G4 \text{---} G8$

- G2 = carbon chain <containing 1-4 C> (opt. substd. by 1 or more G15) / carbocycle <containing 3-4 C> (opt. substd. by 1 or more G15) / heterocycle <containing 3-4 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd. by 1 or more G15) / 31 / 33 / carbon chain <containing 1-4 C, no H> (substd. by 3 or more F) / carbocycle <containing 3-4 C, no H> (substd. by 5 or more F) / heterocycle <containing 3-4 atoms, 1 or more heteroatoms, zero or more O, zero or more S, no H> (substd. by 3 or more F) / Ph (opt. substd. by 1 or more G16)

$3G4 \text{---} G14$

$3G14 \text{---} G4 \text{---} G14$

- G3 = carbon chain <containing 2-6 C> (opt. substd. by 1 or more G6) / carbocycle <containing 3-6 C> (opt. substd. by 1 or more G6) / 10-3 9-5 / 11-3 13-5 / heterocycle <containing 3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd. by 1 or more G6) / R / (Specifically claimed: CH2CH2CH2 / CH2CH2)

$1G5 \text{---} G4$

$1G5 \text{---} G4 \text{---} G5$

- G4 = O / S / heteroatom
G5 = carbon chain <containing 2-6 C> (opt. substd.) / carbocycle <containing 3-6 C> (opt. substd.) / heterocycle <containing 3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd.) /
G6 = carbon chain <containing 2-6 C> (opt. substd.) / carbocycle <containing 3-6 C> (opt. substd.) / heterocycle <containing 3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd.) / R
G7 = carbon chain <containing 1-6 C> (opt. substd.) / carbocycle <containing 3-6 C> (opt. substd.) / heterocycle <containing 3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd.) / OH / F / Cl / Br / I / CN / NO2 / aryl (opt. substd.) / carbocycle (opt. substd.) / R
G8 = carbon chain <containing 1-6 C> (opt. substd.) / carbocycle <containing 3-6 C> (opt. substd.) / heterocycle <containing 3-6 atoms, 1 or more heteroatoms, zero or more O, zero or more S> (opt. substd.)

G9 = F / Cl / Br / I / NO2 /
 carbon chain <containing 1-6 C>
 (opt. substd. by 1 or more G12) /
 carbocycle <containing 3-6 C> (opt. substd. by 1 or more G12)
 / 19 / 21 / heterocycle <containing 3-6 atoms,
 1 or more heteroatoms, zero or more O, zero or more S>
 (opt. substd. by 1 or more G12) / 24 / R

1⁹4—G8 2⁹8—G4—G8 2⁹—G10

G10 = carbon chain <containing 1-6 C>
 (opt. substd. by 1 or more G12) /
 carbocycle <containing 3-6 C> (opt. substd. by 1 or more G12)
 / 26 / 28 / heterocycle <containing 3-6 atoms,
 1 or more heteroatoms, zero or more O, zero or more S>
 (opt. substd. by 1 or more G12)

2⁹11—G13 2⁹13—G4—G13

G11 = S / heteroatom
 G12 = carbon chain <containing 1-6 C> (opt. substd.) /
 carbocycle <containing 3-6 C> (opt. substd.) /
 heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S> (opt. substd.) / F / Cl /
 Br / I / R
 G13 = carbon chain <containing 1-6 C>
 (opt. substd. by 1 or more G12) /
 carbocycle <containing 3-6 C> (opt. substd. by 1 or more G12)
 / heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S>
 (opt. substd. by 1 or more G12)
 G14 = carbon chain <containing 1-4 C> (opt. substd.) /
 carbocycle <containing 3-4 C> (opt. substd.) /
 heterocycle <containing 3-4 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S> (opt. substd.) /
 G15 = carbon chain <containing 1-4 C> (opt. substd.) /
 carbocycle <containing 3-4 C> (opt. substd.) /
 heterocycle <containing 3-4 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S> (opt. substd.) / F
 G16 = carbon chain <containing 1-6 C>
 (opt. substd. by 1 or more G17) /
 carbocycle <containing 3-6 C> (opt. substd. by 1 or more G17)
 / heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S>
 (opt. substd. by 1 or more G17) / 36 / 38 / F / Cl / Br / I /
 NO2 / 41 / (Specifically claimed: Me)

3⁹4—G8 3⁹8—G4—G8 4⁹—G18

G17 = carbon chain <containing 1-6 C> (opt. substd.) /
 carbocycle <containing 3-6 C> (opt. substd.) /
 heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S> (opt. substd.) / R
 G18 = carbon chain <containing 1-6 C>

(opt. substd. by 1 or more G17) /
 carbocycle <containing 3-6 C> (opt. substd. by 1 or more G17)
 / heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S>
 (opt. substd. by 1 or more G17) / 43 / 45

4G11—G8

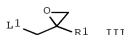
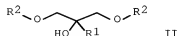
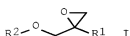
4G8—G4—G8

Patent location: claim 1
 Note: substitution is restricted

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 31 MARPAT COPYRIGHT 2009 ACS ON STN
 ACCESSION NUMBER: 146:100539 MARPAT Full-text
 TITLE: Process for the isolation of
 4-(oxiranylmethoxy)-benzonitriles
 INVENTOR(S): Erbeck, Silke; Kiriacescu, Oscar-Paul; Kronstroem,
 Anders
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
 SOURCE: PCT Int. Appl., 30pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2006137773 | A1 | 20061228 | WO 2006-SE693 | 20060612 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM PRIORITY APPLN. INFO.: SE 2005-1430 20050620 GI | | | | |



AB There is provided a process for the isolation of a compd. of formula I (R1 = H or alkyl; R2 = (un)substituted Ph or pyridyl), or a solvate thereof, from a mixture comprising a compound of formula I and a compound of formula II (R1 and R2 are defined as above), wherein the mixture of compds. of formulas I and II may be prepared by reaction of a compound of formula R2-OH with a compound of formula III (L1 is a leaving group). For example, reaction of 4-cyanophenol with (R)-(-)-epichlorohydrin gave 4-((2S)-oxiranylmethoxy)benzonitrile in 63% yield after purification

MSFR 1



G1 = H / carbon chain <containing 1-6 C> (opt. substd.) /
carbocycle <containing 3-6 C> (opt. substd.) /
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
zero or more O, zero or more S> (opt. substd.) / 8 / 10



G2 = 80-104 81-77 82-75 83-76 78-85 /
89-104 90-77 91-75 86-76 87-85 /
96-104 95-77 97-75 92-76 93-85 /
103-104 101-77 102-75 98-76 99-85



G3 = carbon chain <containing 1-6 C> (opt. substd.) /
carbocycle <containing 3-6 C> (opt. substd.) /
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
zero or more O, zero or more S> (opt. substd.) / 23 / 25



G5 = O / S / heteroatom

G6 = carbon chain <containing 1-6 C> (opt. substd.) /
carbocycle <containing 3-6 C> (opt. substd.) /
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
zero or more O, zero or more S> (opt. substd.)

G8 = H / OH / CN / F / Cl / Br / I / NO2 /
carbon chain <containing 1-6 C> (opt. substd.) /
carbocycle <containing 3-6 C> (opt. substd.) /
heterocycle <containing 3-6 atoms, 1 or more heteroatoms,

zero or more O, zero or more S> (opt. substd.) / 13 / 15 /
 18 / 28 / NH2 / 35 / heterocycle <containing 4-7 atoms,
 1 or more heteroatoms, 1 or more N,
 attached through 1 or more N, non-aromatic, saturated>
 (opt. substd.) / CHO / 44 / CO2H / 46 / 49 / 55 / 68 / 70 /
 74 / aryl (opt. substd.) / carbocycle (opt. substd.)

135—G6 136—G5—G6 136—NH—C(O)—O—G3 29—G10

3911—G12 48(O)—G16 48(O)—O—G16 49(O)—G13 5914—G15

028—G13 028—G16 79—SO2—G16

G9 = S / heteroatom

G10 = carbon chain <containing 1-6 C> (opt. substd.) /
 carbocycle <containing 3-6 C> (opt. substd.) /
 heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S> (opt. substd.) / 30 / 32

399—G6 396—G5—G6

G11 = NH / 37

39—G12

G12 = carbon chain <containing 1-6 C> (opt. substd.) /
 carbocycle <containing 3-6 C> (opt. substd.) /
 heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S> (opt. substd.) / 39 / 41

399—G6 496—G5—G6

G13 = NH2 / 51

5914—G16

G14 = NH / 53

59—G16

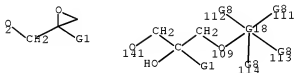
G15 = CHO / 57 / 59 / 61

59(0)=G16 59(0)=G13 028=G16

G16 = carbon chain <containing 1-6 C> (opt. substd.) /
 carbocycle <containing 3-6 C> (opt. substd.) /
 heterocycle <containing 3-6 atoms, 1 or more heteroatoms,
 zero or more O, zero or more S> (opt. substd.) / 63 / 65

695=G6 696=G5=G6

G17 = 2 / 141 / OH



G18 = 117-109 118-112 119-111 120-113 115-114 /
 125-109 126-112 127-111 122-113 123-114 /
 132-109 131-112 133-111 128-113 129-114 /
 139-109 137-112 138-111 134-113 135-114



Patent location: claim 1
 Note: or solvates
 Note: also incorporates formula II
 Note: also incorporates claim 9, formula III

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 31 MARPAT COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 146:71602 MARPAT Full-text

TITLE: Optical device structure

INVENTOR(S): Kaerkkainen, Ari

PATENT ASSIGNEE(S): Braggone Oy, Finland

SOURCE: PCT Int. Appl., 53pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2006134218 | A1 | 20061221 | WO 2006-FI209 | 20060615 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, | | | | |

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
 KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW,
 MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
 SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
 VC, VN, YU, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

US 20080284320 A1 20081120 US 2008-917506 20080104
 PRIORITY APPLN. INFO.: US 2005-691315P 20050615
 WO 2006-FI209 20060615

AB A method of fabricating a photonic crystal device is described entailing providing a substrate; depositing on the substrate a first optical material having a first index of refraction to form a first layer; and depositing on the first layer a second layer of a second optical material having a second index of refraction, which is lower than that of the first optical material; where at least one of the optical materials is a material selected from the group of liquid phase processible metal oxides, liquid phase processible metalloid oxides and mixts. thereof; and the index of refraction of the first optical material is 1.9 or higher at a wavelength of 632.8 nm. A photonic crystal is also described. An organic light emitting diode is also described comprising, in overlapping arrangement, a substrate; a high refractive index layer; a low refractive index layer; a patterned low refractive index layer; and an organic light emitting diode structure, where the refractive index layers may form photonic crystal device.

MSTR 1A



G1 = 15 / R <"metal"> / (Specifically claimed: Sb)



G2 = alkyl (opt. substd. by (1-3) G3) /
 cycloalkyl (opt. substd. by (1-3) G3) / 13



G3 = OH / CO2H / R <"anhydride"> / NO2 / 10



G4 = NH (opt. substd.)

G5 = H / R

G6 = carbon chain (opt. substd.) /
 carbocycle <non-aromatic> (opt. substd.)
 G7 = R <"metal"> / (Specifically claimed: Ge / Ti / Sn /
 Ta / Hf / Zr / Si)
 G8 = halo / 2

9-2

Patent location: claim 4

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 9 OF 31 MARPAT COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 145:420288 MARPAT Full-text

TITLE: Polyethylene resins for food packaging - films, bags
 and pouches and preparation thereof

INVENTOR(S): Goyal, Shivendra Kumar; Boparai, Ishkmandeep Kaur

PATENT ASSIGNEE(S): Nova Chemicals (International) S.A., Switz.

SOURCE: PCT Int. Appl., 44pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

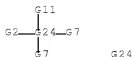
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

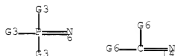
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|----------|
| WO 2006108265 | A1 | 20061019 | WO 2006-CA360 | 20060315 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| US 20060235147 | A1 | 20061019 | US 2005-106265 | 20050414 |
| CA 2539762 | A1 | 20061014 | CA 2006-2539762 | 20060315 |
| PRIORITY APPLN. INFO.: | | | US 2005-106265 | 20050414 |

AB Packaging films, bags and pouches for foods, such as meat, vegetables, dairy products, dry goods, bakery goods, ice, microwavable foods, syrup, water, beverage, juice, and baby bottle liners, are made from LLDPE having a d. of 0.914 - 0.945, which is prepared from ethylene and C3-12 α -olefins in solvent in a first reactor at 80-200° in the presence of organometallic complexes catalyst having phosphinimine ligand and co-catalyst selected from aluminoxane and ionic activator, and in a second reactor further polymerizing with ethylene and α -olefins at 10,500 - 35,000 KPa and 20° higher than the first reactor. Thus, ethylene and octene were polymerized in the presence of CpTiNP(t-Bu)3Cl2 as catalyst, and methylalumoxane (MMAO-7) and triphenylcarbenium tetrapentafluorophenylborate as cocatalyst to prepare the LLDPE for food packaging materials.

MSTR: 4



G2 = 6 / 14



G3 = H / halo / carbon chain <containing 1-20 C>
 (opt. substd. by 1 or more G21) /
 carbocycle <containing 3-20 C> (opt. substd. by 1 or more
 G21) / alkoxy <containing 1-8 C> /
 aryl <containing 6-10 C> (opt. substd. by (1-3) G13) /
 aryloxy <containing 6-10 C> (opt. substd. by (1-3) G13) /
 NH2 (opt. substd.) / 9 / 44 / (Specifically claimed: alkyl
 <containing 1-10 C>)



G4 = H / alkyl <containing 1-8 C> /
 alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
 aryloxy <containing 6-10 C> / (Specifically claimed: Ph)
 G6 = R <"substituent"> / (Specifically claimed: carbon
 chain <containing 3 or more C> (opt. substd.) /
 carbocycle <containing 3 or more C> (opt. substd.))
 G7 = R <"activatable ligand"> /
 (Specifically claimed: H / Cl / F /
 carbon chain <containing 1-10 C>
 (opt. substd. by 1 or more G23) /
 carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)
 / 16)

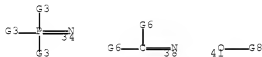


G8 = alkyl <containing 1 or more C>
 (opt. substd. by 1 or more G23) /
 aryl <containing 6-10 C> (opt. substd. by 1 or more G9)
 G9 = halo / alkyl <containing 1-8 C> /
 alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
 aryloxy <containing 6-10 C> / NH2 /
 alkylamino <containing 1-8 C> /

dialkylamino <each alkyl containing 1-8 C> / 20

G10  G10

- G10 = alkyl <containing 1-8 C> / H
G11 = 34 / 38 / R <"activatable ligand"> /
(Specifically claimed: H / Cl / F /
carbon chain <containing 1 or more C>
(opt. substd. by 1 or more G23) /
carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)
/ 41)



- G12 = H / alkyl <containing 1-8 C> /
alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
aryloxy <containing 6-10 C>
G13 = R / (Specifically claimed: alkyl <containing 1-4 C>)
G21 = R / halo
G23 = halo / alkoxy <containing 1-8 C> /
aryl <containing 6-10 C> / aryloxy <containing 6-10 C> /
NH2 / alkylamino <containing 1-8 C> /
dialkylamino <each alkyl containing 1-8 C> / 73

G10  G10

- G24 = R <"transition metal"> / (Specifically claimed: Ti /
Zr / Hf)

Patent location: claim 2

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 10 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 145:249682 MARPAT Full-text
TITLE: Broad/bimodal polyolefin resins with controlled
comonomer distribution
INVENTOR(S): Hoang, Peter Phung Minh; Baxter, Gail
PATENT ASSIGNEE(S): Nova Chemicals (International) S.A., Switz.
SOURCE: U.S. Pat. Appl. Publ., 12pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| ----- | --- | ----- | ----- | ----- |
| US 20060189769 | A1 | 20060824 | US 2005-64293 | 20050222 |
| CA 2533066 | A1 | 20060822 | CA 2006-2533066 | 20060117 |

WO 2006089394 A1 20060831 WO 2006-CA66 20060123

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

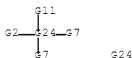
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

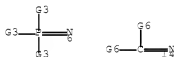
US 2005-64293 20050222

AB Olefin polymers having a conventional comonomer incorporation, a reverse (or partial reverse) comonomer incorporation or a substantially flat comonomer incorporation with a broad, bimodal or multimodal mol. weight distribution are produced under polymerization conditions using a single site catalyst with the combination of a phosphinimine and/or ketimide compound, and an Al compound in a cyclical controlled increase of the C2H4/H ratio and controlled or uncontrolled decrease of the C2H4/H ratio if plotted as a function of time. Thus, polymerization of C2H4 and hexene 60 min at 70° and H 30 psia in the presence of (tert-bu3PN)C6F5(n-bu)CpTiCl2 (preparation given), triisobutyl aluminum, and MAO gave bimodal copolymer having polydispersity 20.5.

MSTR 1A



G2 = 6 / 14



G3 = H / halo / carbon chain <containing 1-20 C> (opt. substd. by 1 or more G21) / carbocycle <containing 3-20 C> (opt. substd. by 1 or more G21) / alkoxy <containing 1-8 C> / aryl <containing 6-10 C> (opt. substd. by (1-3) G13) / aryloxy <containing 6-10 C> (opt. substd. by (1-3) G13) / NH2 (opt. substd.) / 9 / 44 / (Specifically claimed: alkyl <containing 1-10 C>)



- G4 = H / alkyl <containing 1-8 C> /
alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
aryloxy <containing 6-10 C> / (Specifically claimed: Ph)
- G6 = R <"substituent"> / (Specifically claimed: carbon
chain <containing 3 or more C> (opt. substd.) /
carbocycle <containing 3 or more C> (opt. substd.))
- G7 = R <"activatable ligand"> /
(Specifically claimed: H / Cl / F /
carbon chain <containing 1-10 C>
(opt. substd. by 1 or more G23) /
carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)
/ 18)



- G8 = alkyl <containing 1 or more C>
(opt. substd. by 1 or more G23) /
aryl <containing 6-10 C> (opt. substd. by 1 or more G9)
- G9 = halo / alkyl <containing 1-8 C> /
alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
aryloxy <containing 6-10 C> / NH2 /
alkylamino <containing 1-8 C> /
dialkylamino <each alkyl containing 1-8 C> / 20



- G10 = alkyl <containing 1-8 C> / H
- G11 = 34 / 38 / R <"activatable ligand"> /
(Specifically claimed: H / Cl / F /
carbon chain <containing 1 or more C>
(opt. substd. by 1 or more G23) /
carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)
/ 41)



- G12 = H / alkyl <containing 1-8 C> /
alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
aryloxy <containing 6-10 C>
- G13 = R / (Specifically claimed: alkyl <containing 1-4 C>)
- G21 = R / halo
- G23 = halo / alkoxy <containing 1-8 C> /
aryl <containing 6-10 C> / aryloxy <containing 6-10 C> /
NH2 / alkylamino <containing 1-8 C> /
dialkylamino <each alkyl containing 1-8 C> / 73



G24 = R <"transition metal"> / (Specifically claimed: Ti /
Zr / Hf)

Patent location: claim 1

L17 ANSWER 11 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 145:456021 MARPAT Full-text

TITLE: Dual reactor produced polyethylene resins for
electronic packaging - film, tapes, bags and pouches
INVENTOR(S): Goyal, Shivendra Kumar; Boparai, Ishkmandeep Kaur
PATENT ASSIGNEE(S): Nova Chemicals Corporation, Can.
SOURCE: Can. Pat. Appl., 44pp.
CODEN: CPXXEB

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| CA 2539806 | A1 | 20061028 | CA 2006-2539806 | 20060315 |
| US 20060247373 | A1 | 20061102 | US 2005-116990 | 20050428 |
| WO 2006113983 | A1 | 20061102 | WO 2006-CA362 | 20060315 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: US 2005-116990 20050428

AB This invention relates to packaging films, tapes, bags and pouches having excellent optical properties and heat sealability, low hexane extractables and a good balance of phys. properties. These packaging and may be prepared from linear low d. polyethylene having a melt flow ratio (I21/I2) from about 23 to about 32, manufactured in a tandem dual reactor solution phase polymerization in the presence of a phosphinimine catalyst and co-catalyst system which comprises an aluminum based co-catalyst and ionic activator.

MSTR 4A

G11
G2 24 G7
G7 G24



- G3 = H / halo / carbon chain <containing 1-20 C> /
 (opt. substd. by 1 or more G21) /
 carbocycle <containing 3-20 C> (opt. substd. by 1 or more
 G21) / alkoxy <containing 1-8 C> /
 aryl <containing 6-10 C> (opt. substd. by (1-3) G13) /
 aryloxy <containing 6-10 C> (opt. substd. by (1-3) G13) /
 NH2 (opt. substd.) / 9 / 44 / (Specifically claimed: alkyl
 <containing 1-10 C>)



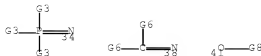
- G4 = H / alkyl <containing 1-8 C> /
 alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
 aryloxy <containing 6-10 C> / (Specifically claimed: Ph)
 G6 = R <"substituent"> / (Specifically claimed: carbon
 chain <containing 3 or more C> (opt. substd.) /
 carbocycle <containing 3 or more C> (opt. substd.))
 G7 = R <"activatable ligand"> /
 (Specifically claimed: H / Cl / F /
 carbon chain <containing 1-10 C> /
 (opt. substd. by 1 or more G23) /
 carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)
 / 18)



- G8 = alkyl <containing 1 or more C>
 (opt. substd. by 1 or more G23) /
 aryl <containing 6-10 C> (opt. substd. by 1 or more G9)
 G9 = halo / alkyl <containing 1-8 C> /
 alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
 aryloxy <containing 6-10 C> / NH2 /
 alkylamino <containing 1-8 C> /
 dialkylamino <each alkyl containing 1-8 C> / 20



- G10 = alkyl <containing 1-8 C> / H
 G11 = 34 / 38 / R <"activatable ligand"> /
 (Specifically claimed: H / Cl / F /
 carbon chain <containing 1 or more C>
 (opt. substd. by 1 or more G23) /
 carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9)
 / 41)



G12 = H / alkyl <containing 1-8 C> /
 alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
 aryloxy <containing 6-10 C>
 G13 = R / (Specifically claimed: alkyl <containing 1-4 C>)
 G21 = R / halo
 G23 = halo / alkoxy <containing 1-8 C> /
 aryl <containing 6-10 C> / aryloxy <containing 6-10 C> /
 NH₂ / alkylamino <containing 1-8 C> /
 dialkylamino <each alkyl containing 1-8 C> / 73

G10—G10

G24 = R <"transition metal"> / (Specifically claimed: Ti /
 Zr / Hf)

Patent location: claim 2

L17 ANSWER 12 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 145:315400 MARPAT Full-text
 TITLE: Dual reactor polyethylene resins with balanced
 physical properties
 INVENTOR(S): Boparai, Ishkmandeep Kaur; Goyal, Shivendra Kumar
 PATENT ASSIGNEE(S): Nova Chemicals Corporation, Can.
 SOURCE: Can. Pat. Appl., 31pp.
 CODEN: CPXXEB
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| CA 2533120 | A1 | 20060908 | CA 2006-2533120 | 20060117 |
| US 20060205898 | A1 | 20060914 | US 2005-75322 | 20050308 |
| WO 2006094374 | A1 | 20060914 | WO 2006-CA67 | 20060123 |

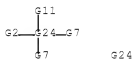
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

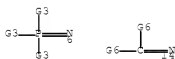
PRIORITY APPLN. INFO.: US 2005-75322 20050308

AB Bags, other than food contact or medical bags, having a good balance of properties may be prepared from linear low d. polyethylene having a melt flow ratio (I21/I2) .apprx.23-32, prepared in a tandem dual reactor solution phase polymerization in the presence of a phosphinimine metal complex catalyst and an Al activator in the first reactor and an ionic activator in the second reactor.

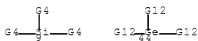
MSFP 1A



G2 = 6 / 14



G3 = H / halo / carbon chain <containing 1-20 C> (opt. substd. by 1 or more G21) / carbocycle <containing 3-20 C> (opt. substd. by 1 or more G21) / alkoxy <containing 1-8 C> / aryl <containing 6-10 C> (opt. substd. by (1-3) G13) / aryloxy <containing 6-10 C> (opt. substd. by (1-3) G13) / NH2 (opt. substd.) / 9 / 44 / (Specifically claimed: alkyl <containing 1-10 C>)



G4 = H / alkyl <containing 1-8 C> / alkoxy <containing 1-8 C> / aryl <containing 6-10 C> / aryloxy <containing 6-10 C> / (Specifically claimed: Ph)

G6 = R <"substituent"> / (Specifically claimed: carbon chain <containing 3 or more C> (opt. substd.) / carbocycle <containing 3 or more C> (opt. substd.))

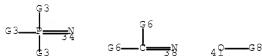
G7 = R <"activatable ligand"> / (Specifically claimed: H / Cl / F / carbon chain <containing 1-10 C> (opt. substd. by 1 or more G23) / carbocycle <containing 3-10 C> (opt. substd. by 1 or more G9) / 18)



G8 = alkyl <containing 1 or more C>
 {opt. substd. by 1 or more G23} /
 aryl <containing 6-10 C> {opt. substd. by 1 or more G9}
 G9 = halo / alkyl <containing 1-8 C> /
 alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
 aryloxy <containing 6-10 C> / NH2 /
 alkylamino <containing 1-8 C> /
 dialkylamino <each alkyl containing 1-8 C> / 20



G10 = alkyl <containing 1-8 C> / H
 G11 = 34 / 38 / R <"activatable ligand"> /
 (Specifically claimed: H / Cl / F /
 carbon chain <containing 1 or more C>
 {opt. substd. by 1 or more G23} /
 carbocycle <containing 3-10 C> {opt. substd. by 1 or more G9}
 / 41)



G12 = H / alkyl <containing 1-8 C> /
 alkoxy <containing 1-8 C> / aryl <containing 6-10 C> /
 aryloxy <containing 6-10 C>
 G13 = R / (Specifically claimed: alkyl <containing 1-4 C>)
 G21 = R / halo
 G23 = halo / alkoxy <containing 1-8 C> /
 aryl <containing 6-10 C> / aryloxy <containing 6-10 C> /
 NH2 / alkylamino <containing 1-8 C> /
 dialkylamino <each alkyl containing 1-8 C> / 73



G24 = R <"transition metal"> / (Specifically claimed: Ti /
 Zr / Hf)

Patent location: claim 2

L17 ANSWER 13 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 143:316927 MARPAT [Full-text](#)
 TITLE: Alkoxide compound, raw material for thin film
 formation and process for producing thin film
 INVENTOR(S): Sato, Hiroki; Sakurai, Atsushi
 PATENT ASSIGNEE(S): Asahi Denka Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 35 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 14 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 144:55443 MARPAT Full-text

TITLE: Synthesis of hybrid metal oxide thin films by liquid phase deposition from organic compound solubility agent and metal alkoxides and halides for electronic and opto-electronic devices

INVENTOR(S): Karkkainen, Ari

PATENT ASSIGNEE(S): Oy, Braggone, Finland

SOURCE: U.S. Pat. Appl. Publ., 17 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| US 20050277274 | A1 | 20051215 | US 2004-868624 | 20040615 |
| US 7094709 | B2 | 20060822 | | |
| WO 2005123595 | A1 | 20051229 | WO 2005-FI280 | 20050615 |
| W: | | | | |
| AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: | | | | |
| BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1761462 | A1 | 20070314 | EP 2005-754070 | 20050615 |
| R: | | | | |
| AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| JP 2008503331 | T | 20080207 | JP 2007-515975 | 20050615 |
| KR 2007027705 | A | 20070309 | KR 2007-701039 | 20070115 |
| US 20080022896 | A1 | 20080131 | US 2007-629562 | 20070129 |
| PRIORITY APPLN. INFO.: | | | US 2004-868624 | 20040615 |
| | | | WO 2005-FI280 | 20050615 |

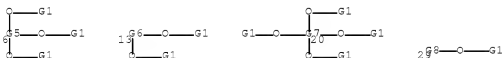
AB The present invention relates to metal oxide coating materials that can be used as thin film thin film coatings on various substrate surfaces. The invention also concerns a method of making metal oxide material which are stable in aqueous phase and that can be deposited on a substrate by liquid phase deposition, such as spin-on deposition. The new materials can be patterned lithog. or non-lithog. and are applicable for building up various electronic and opto-electronic device structures, such as antireflection layers, high-k interlayer and gate oxide structures for ICs, etch stop layer, CMP stop layer, solar cells, OLEDs packaging, optical thin film filters, optical diffractive grating applications and hybrid thin film diffractive grating structures.

G1—O—G4

G1 = carbon chain <0 or more double bonds,
0 or more triple bonds> (opt. substd. by (1-3) G2) /
carbocycle <non-aromatic, 0 or more double bonds>
(opt. substd. by (1-3) G2) / 4

G3=

G2 = OH / CO2H / NO2 / CONH2 (opt. substd.)
G3 = carbon chain <0 or more double bonds,
0 or more triple bonds> (opt. substd. by (1-3) G2) /
carbocycle <non-aromatic, 0 or more double bonds>
(opt. substd. by (1-3) G2)
G4 = 6 / 13 / 20 / 29



G5 = R <"metal atom"> / (Specifically claimed: Ge / Ti /
Sn / Hf / Zr / Si)
G6 = R <"metal atom"> / (Specifically claimed: Ti / Sb)
G7 = R <"metal atom"> / (Specifically claimed: Ta / Sb)
G8 = R <"metal atom"> / (Specifically claimed: Sn)
Patent location: claim 17

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 15 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 140:199912 MARPAT [Full-text](#)
TITLE: Production of polyesters in the presence of metal
complexes
INVENTOR(S): Rafler, Gerald; Kommolk, Ralf; Otto, Brigitta
PATENT ASSIGNEE(S): Zimmer A.-G., Germany
SOURCE: Ger. Offen., 13 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|----------|
| DE 10337522 | A1 | 20040226 | DE 2003-10337522 | 20030814 |
| PRIORITY APPLN. INFO.: | | | DE 2003-10337522 | 20030814 |

AB A process for prodn. of a polyester is carried out in the presence of a metal complex of the general formula (R1O)(R2O)M(OR3)(OR4), where M is Ti, Zr or Hf; the substituents R1-R4 are independently selected from H, -PO(OR1')(OR2'), -PO(R5)(OR3'), -SO2R4', -CR6=X, -CR7=CR8-CR9=X, -P(=X)(OR10)(OR11), -P(=X)(=CR12R13), -PO(OH)-O-P(=X)(OR5')(OR6'), -PO(OR7')-O-P(=X)O, and -

CR14R8'-C(=X)OA, substituted or unsubstituted aryl, alkyl, alkenyl, aminoalkyl, and (N-alkylenediamino)alkyl groups; the substituents R1 and R2, R1 and R3, R1 and R4, R2 and R3, R2 and R4 and/or R3 and R4 can form at least one bridging ligand, such as -PO(OR15)-O-PO-(OR16)-; A is selected from alkali metal and ammonium; the substituents R5-R16 are independently selected from H, -PO(OR9')(OR10'), -HPOOR11', -SO2R12', substituted or unsubstituted alkyl and aryl groups; the substituents R1'-R12' are independently selected from substituted or unsubstituted alkyl and aryl groups; the substituent X is O or S; and at least one of the substituents R1-R4 is different from H, alkyl or aryl group. The method provides high mol. weight polyesters (> 22,000 g/mol) without the need for a solid phase post-polycondensation stage. Thus, bis(2-hydroxyethyl) terephthalate was polymerized at 270° in the presence of 16.5 ppm of bis(ammonium lactato)titanium dihydroxide to produce poly(ethylene terephthalate) having intrinsic viscosity of 0.85 dL/g and an acid value of 23.4 mmol/kg.

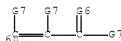
HSTP. 1A



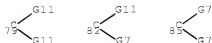
G1 = Ti / Zr / Hf
G2 = OH / 15



G3 = 11 / 19 / 24 / 41 / 44 / 60 / 66 / 69 / 76 / 87 /
97 / 109 / aryl (opt. substd.) /
alkyl (opt. substd. by G17) / alkenyl (opt. substd.) / 171 /
(Examples: 136 / 140 / 143 / octyl / Pr-i / 172 / 182)

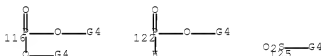


G10 = 79 / 82 / 85



G11 = alkyl (opt. substd.)

G12 = H / 116 / 122 / 125 / alkyl (opt. substd.) /
aryl (opt. substd.)



G13 = 127 / 129



G14 = alkali metal atom / NH3 (opt. substd.)

G15 = R

G16 = alkylene (opt. substd.)

G17 = R / NR2

Patent location: claim 1

L17 ANSWER 16 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 139:85793 MARPAT Full-text
TITLE: Catalytic composition and process for the selective
oligomerization of ethylene to light linear
alpha-olefins

INVENTOR(S): Biagini, Paolo; Gila, Liliana

PATENT ASSIGNEE(S): Polimeri Europa S.p.A., Italy

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2003053573 | A2 | 20030703 | WO 2002-EP13957 | 20021209 |
| WO 2003053573 | A3 | 20030821 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,

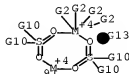
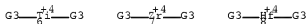
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 IT 2001MI2629 A1 20030613 IT 2001-MI2629 20011213
 AU 2002358113 A1 20030709 AU 2002-358113 20021209
 EP 1453604 A2 20040908 EP 2002-791797 20021209
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
 US 20050070425 A1 20050331 US 2004-497537 20041109
 PRIORITY APPLN. INFO.: IT 2001-MI2629 20011213
 WO 2002-EP13957 20021209

AB The invention relates to a catalytic compn. for the selective oligomerization of ethylene and a process for preparing light linear α -olefins, especially 1-hexene and 1-octene, starting from ethylene, using this composition, said composition comprising: (A) a compound of a transition metal M of Group 4 of the periodic table; (B) an organic compound containing the sulfonic group ($>SO_2$) bonded to two carbon atoms; (C) a hydrocarbyl organometallic compound of a metal M' selected from elements of Groups 1, 2, 12, 13 or 14 of the periodic table; components (A), (B) and (C) being in such a quantity that the atomic ratios resp. of the metal M in (A), of the sulfur S in the sulfonic group of (B) and of the metal M' in (C), respect the following proportions: S/M = (from 0 to 20)/1 and M'/M = (from 2 to 2000)/1, on the condition that when the compound of the metal M in component (A) is not a sulfonic complex of M, the S/M ratio is greater than 0.5, preferably greater than 1.

MSMR 1

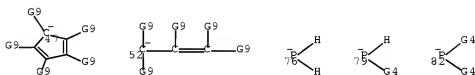
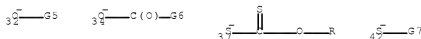
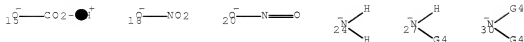


G1 = 6 / 7 / 8 / (Specifically claimed: 91)

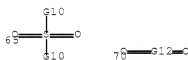


G2 = R <"ligand", (-1) charge> /
 (Specifically claimed: chloride / bromide / hydroxide / 15 /
 18 / 20 / 24 / 27 / 30 / 76 / 79 / 82 /
 heterocycle <containing zero or more N, zero or more P,
 attached through 1 or more heteroatoms, (-1) charge> / 32 /
 34 / 37 / 42 / carbon chain <containing up to 15 C,
 (-1) charge> (opt. substd. by 1 or more G8) /
 carbocycle <containing up to 15 C, (-1) charge>
 (opt. substd. by 1 or more G8) /
 alkyl <containing up to 15 C, (-1) charge>

(opt. substd. by 1 or more G8) /
 aryl <containing up to 15 C, (-1) charge>
 (opt. substd. by 1 or more G8) / 47 / 52)



G3 = R <"neutral organic ligand"> /
 (Specifically claimed: 65 / 70)



G4 = alkyl <containing 1-20 C> /
 aryl <containing up to 20 C>
 G5 = alkyl <containing 1-10 C>
 G6 = R / NH2 {opt. substd.}
 G7 = alkyl
 G8 = R / halo / Cl / F / R <"anionic group">
 G9 = H / R / halo / Cl / F / R <"anionic group">
 G10 = carbon chain <containing 1-20 C>
 (opt. substd. by 1 or more G11) /
 carbocycle <containing up to 20 C, non-aromatic>
 (opt. substd. by 1 or more G11) /
 aryl <containing up to 20 C> (opt. substd. by 1 or more G11)
 / R <"heteroatom-containing hydrocarbon", containing 1-20 C>
 / (Examples: Et / Ph / Me)
 G11 = halo / R
 G12 = heterocycle <containing 1 or more S, 4-20 C,
 attached through 1 S>
 G13 = Ti / Zr / Hf
 Patent location: claim 4
 Note: additional ligands, metal valences, and ring
 formation also claimed

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

L17 ANSWER 17 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 139:53470 MARPAT Full-text
 TITLE: Complexes with sulfonic ligands for selective
 oligomerization of ethylene
 INVENTOR(S): Biagini, Paolo; Gila, Lilliana
 PATENT ASSIGNEE(S): Polimeri Europa S.P.A., Italy
 SOURCE: PCT Int. Appl., 45 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|----------|
| WO 2003050126 | A1 | 20030619 | WO 2002-EP13955 | 20021209 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| IT 2001MI2630 | A1 | 20030613 | IT 2001-MI2630 | 20011213 |
| AU 2002356640 | A1 | 20030623 | AU 2002-356640 | 20021209 |
| PRIORITY APPLN. INFO.: | | | IT 2001-MI2630 | 20011213 |
| | | | WO 2002-EP13955 | 20021209 |

AB Sulfonic complexes having the formula $[MX_1X_2X_3(X_4)_nY_m]_s$ where M = Zr or Hf; X1-4 = any organic or inorg., mono-anionic ligand; Y = ligand consisting of a neutral sulfonic compound coordinated to the metal M by ≥ 1 O atom; n = 0 or 1, if the oxidation state of the metal M is 3 or 4; m ≤ 2 , preferably 1-2; and s = 1-6. The complexes, combined with an alkylating organometallic compound, e.g. alkyl aluminum halide, gave oligomerization catalysts for ethylene, selective towards the production of 1-hexene and 1-octene. Catalysts such as zirconium tetrachloride bis-dimethylsulfone were prepared

MSTR 1A

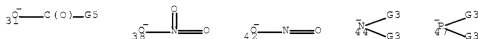


G1 = 7 / 8 / 92 / 104





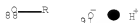
G2 = R <"ligand", (-1) charge> / chloride /
 (Specifically claimed: hydroxide / 31 / 38 / 42 / 44 / 47 /
 49 / 55 / 60 / 63 / carbon chain <containing 1-15 C,
 (-1) charge> (opt. substd. by G9) /
 carbocycle <containing 3-15 C, (-1) charge>
 (opt. substd. by G9))



G3 = H / alkyl <containing 1-20 C> /
 aryl <containing 6-20 C>
 G4 = alkyl <containing 1-10 C>
 G5 = 33 / 87 / NH₂ (opt. substd.) / H /
 carbon chain (opt. substd.) / R



G6 = H / R
 G7 = carbon chain (opt. substd. by 1 or more G8) /
 carbocycle (opt. substd. by 1 or more G8) / (Examples: Me /
 Ph)
 G8 = R / (Specifically claimed: halo)
 G9 = halo / Cl / F / R
 G10 = 88 / 91



Patent location: claim 1
 Note: additional ligands, metal valences, and ring
 formation also

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

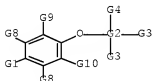
L17 ANSWER 18 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 136:118862 MARPAT Full-text

TITLE: A catalyst system and its use in a polymerization process
 INVENTOR(S): Gindelberger, David E.; McConville, David H.
 PATENT ASSIGNEE(S): Univation Technologies, LLC, USA
 SOURCE: PCT Int. Appl., 43 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------|--|----------|-----------------|----------|
| WO 2002006358 | A1 | 20020124 | WO 2001-US19508 | 20010618 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | |
| RM: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2416197 | A1 | 20020124 | CA 2001-2416197 | 20010618 |
| EP 1303543 | A1 | 20030423 | EP 2001-942214 | 20010618 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| BR 2001012516 | A | 20030909 | BR 2001-12516 | 20010618 |
| JP 2004504420 | T | 20040212 | JP 2002-512258 | 20010618 |
| US 20050043497 | A1 | 20050224 | US 2003-688870 | 20031017 |
| PRIORITY APPLIN. INFO.: | | | US 2000-617663 | 20000717 |
| | | | WO 2001-US19508 | 20010618 |

AB Disclosed is a catalyst system including a phenoxide transition metal catalyst compound and a Lewis acid containing activator, a supported catalyst system thereof, a method of preparing the catalyst system and a process for polymerizing olefin(s) using same. Thus, 0.42 g bis(N-benzylidene-2-hydroxy-3,5-di-tert-butylbenzylamine) zirconium(IV) dibenzyl in toluene and 1 g treated silica were stirred for 10 min, filtered, and 0.1 g of which was used as a catalyst to polymerize ethylene.

MSTR 2



G1 = H / R <"heteroatom-containing group",
 containing 1 or more heteroatoms> /
 hydrocarbyl <containing 1-100 C> /
 (Specifically claimed: Bu-t / C(Me)2CH2Me / 59 /
 C(Me)2CH2CMe3 / 277 / SiMe3) / (Examples: alkyl <containing
 4-20 C> / Bu-n / Bu-i / pentyl / hexyl / heptyl / 45 /

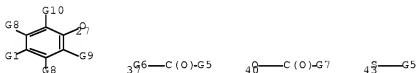
octyl / decyl / nonyl / dodecyl)



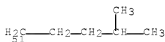
- G2 = R <"Group 3 to 10 transition metal or lanthanide metal"> / (Specifically claimed: Zr / Ti / Hf)
 G3 = R <"anionic ligand"> / (Specifically claimed: CH2Ph / Cl / NMe2 / 247) / (Examples: halo / alkyl / 29 / 32 / 35 / H / alkoxy)



- G4 = R <"anionic ligand"> / 27 / (Specifically claimed: CH2Ph / Cl / NMe2 / 243) / (Examples: halo / alkyl / 37 / 40 / 43 / H / alkoxy)

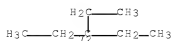


- G5 = H / R
 G6 = NH / O
 G7 = NH2 (opt. substd.)
 G8 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Examples: alkyl <containing 4-20 C> / Bu-n / Bu-i / Bu-t / pentyl / hexyl / heptyl / 51 / octyl / decyl / nonyl / dodecyl)

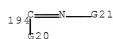
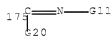
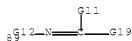


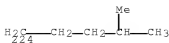
- G9 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Specifically claimed: Bu-t / C(Me)2CH2Me / 78 / CPh3 / SiMe3 / Ph / 252 / 260 / C(Me)2CH2CMe3 / 270) /

(Examples: 72 / 82 / 86)



G10 = H / R <"heteroatom-containing group",
containing 1 or more heteroatoms> /
hydrocarbyl <containing 1-100 C> /
(Specifically claimed: 116 / OMe / 230) / (Examples: 89 /
95 / 100 / 105 / 118 / NH₂ / 121 / OH / 125 / 130 / 133 /
136 / SH / 147 / 149 / 152 / 160 / 175 / 181 / 185 / 191 /
2-pyridyl / 194 / 202 / 207 / 212 /
alkyl <containing 4-20 C> / Bu-n / Bu-i / Bu-t / pentyl /
hexyl / heptyl / 224 / octyl / decyl / nonyl / dodecyl)





G11 = H / alkyl / aryl / SiH3 (opt. substd.) / OH / 169



G12 = CH2 (opt. substd.)

G13 = NH / 123 / O



G14 = alkyl / aryl / SiH3 (opt. substd.) / OH / 171



G15 = OH / 127 / 139 / 142 / 145 / SH / 163 / NH2 / 165



G16 = O / S / 156



G17 = NH / 167



G18 = alkyl / aryl / SiH3 (opt. substd.)

G19 = H / alkyl / aryl / SiH3 (opt. substd.) / OH / 173 /
(Specifically claimed: Ph)



G20 = H / Me / Bu-t

G21 = NH2 / 198 / OH / 200

198-014 200-014

G22 = Ph / Me / Et / Pr-i / Bu-t / CH2Ph / Bu-i / hexyl /
235



Patent location: claim 8
Note: substitution is restricted
Note: additional ring formation and bridging also claimed
Note: and metal salts and complexes

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 19 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 137:109632 MARPAT Full-text
TITLE: Functional organic particles for polymerization
catalyst supports

INVENTOR(S): Hoang, Peter Phung Minh; Russell, Charles; Kearns,
Jason Roy; Wanke, Sieghard E.; Lynch, David T.; Li,
Nai-hong

PATENT ASSIGNEE(S): The Governors of the University of Alberta, Can.

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

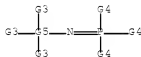
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| US 20020103073 | A1 | 20020801 | US 2000-728843 | 20001201 |
| US 6583082 | B2 | 20030624 | | |
| CA 2365539 | A1 | 20020601 | CA 2001-2365539 | 20011130 |
| US 20030199389 | A1 | 20031023 | US 2003-427027 | 20030430 |
| US 6750303 | B2 | 20040615 | | |

PRIORITY APPLN. INFO.: US 2000-728843 20001201

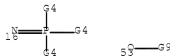
AB A functionalized polymeric support for use in assocn. with a catalyst system comprising a co-catalyst of the formula $R_1R_2AlO(R_1AlO)mAlR_1R_2$ wherein each R_1 is independently selected from the group consisting of C1-20 hydrocarbyl radicals and m is from 3 to 50, the support comprising the suspension or emulsion polymerization product of a feedstock comprising: (i) from 0 to 95% of one or more C4-12 vinyl monomers; (ii) from 50 to 2% of a crosslinking agent; and (iii) from 70 to 3% of a functionalized monomer containing a reactive functional group selected from the group consisting of C1-8 hydroxy esters of C3-6 ethylenically unsatd. carboxylic acids, and chloride derivs. thereof (e.g., hydroxyethyl methacrylate); and having a particle size from 0.1 to 1000 μ m, surface area of greater than 10 m^2/g and a pore volume of at least 0.2 cc/g of support. The supports can increase the activity of these catalysts

which results in improved ethylene polymerization. A support for a metallocene catalyst/MAO cocatalyst was prepared from divinylbenzene, hydroxyethyl methacrylate, and styrene.

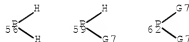
NCI 2E



G3 = R <"ligand"> / 16 / (Specifically claimed: H / halo / Cl / F / carbon chain <containing 1-10 C> (opt. substd. by 1 or more G10) / carbocycle <containing up to 10 C> (opt. substd. by 1 or more G10) / 53)



G4 = H / R / (Specifically claimed: Bu-t)
 G5 = R <"transition metal"> / (Specifically claimed: Ti / V / Zr / Hf / Cr / Fe / Co / Ni / Pd)
 G7 = alkyl <containing 1-8 C>
 G9 = alkyl <containing 1-10 C> (opt. substd. by 1 or more G10) / aryl <containing up to 10 C> (opt. substd. by 1 or more G10)
 G10 = halo / alkyl <containing 1-8 C> / alkoxy <containing 1-8 C> / aryl <containing 6-10 C> / aryloxy <containing 6-10 C> / NH2 / dialkylamino <each alkyl containing 1-8 C> / 56 / 59 / 62



Patent location: claim 21
 Note: additional ligands and ring formation also claimed

L17 ANSWER 20 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 136:20341 MARPAT [Full-text](#)
 TITLE: Manufacture of esters of unsaturated carboxylic acids by transesterification
 INVENTOR(S): Nestler, Gerhard; Schroeder, Juergen
 PATENT ASSIGNEE(S): Basf A.-G., Germany
 SOURCE: PCT Int. Appl., 22 pp.
 CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 2001092198 | A1 | 20011206 | WO 2001-EP6079 | 20010528 |
| W: CN, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR | | | | |
| DE 10026644 | A1 | 20011206 | DE 2000-10026644 | 20000529 |
| EP 1284954 | A1 | 20030226 | EP 2001-960249 | 20010528 |
| EP 1284954 | B1 | 20040804 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR | | | | |
| CN 1213995 | C | 20050810 | CN 2001-810444 | 20010528 |
| US 20030139599 | A1 | 20030724 | US 2002-276318 | 20021125 |
| US 6875888 | B2 | 20050405 | | |

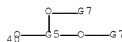
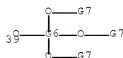
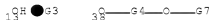
PRIORITY APPLN. INFO.: DE 2000-10026644 20000529
 WO 2001-EP6079 20010528

AB C1-4 Alkyl esters of unsatd. carboxylic acids are transesterified with alcs. ROH [R = C4-20 alkyl, C5-7 cycloalkyl, phenyl(C1-4 alkyl), amino-, hydroxy-, alkoxy-substituted (O-interrupted) C2-12 alkyl] in the presence of metal alcoholates comprising ≥ 1 R1O group (R1 = 2,2,6,6-tetraalkyl-1-oxyl-4-piperidinyl) as transesterification catalysts. For example, transesterification of Et acrylate with Me2NCH2CH2OH in the presence of tetra(2,2,6,6-tetramethylpiperidinyl-1-oxyl-4-oxy) titanate [preparation from (Me2CHO)4Ti and 4-hydroxy-2,2,6,6-tetramethylpiperidinyl-1-oxyl given] gave CH2:CHCO2CH2CH2NMe2 in 97.5% yield, vs. 94% when (Me2CHO)4Ti was used as transesterification catalyst.

MSTR 2

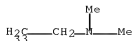


G1 = alkyl / (Specifically claimed: Me)
 G2 = 13 / 38 / 40 / 39



G3 = Ti / Zr / Hf / Al / V / alkali metal atom /
 alkaline earth metal atom
 G4 = V / alkaline earth metal atom
 G5 = Ti / Al / V
 G6 = Ti / Zr / Hf / V

G7 = 43 / alkyl <containing 1-4 C> /
 alkyl <containing 4-20 C> / cycloalkyl <containing 5-7 C> /
 alkyl <containing 1-4 C> (substd. by Ph) /
 alkyl <containing 2-12 C> (substd. by 1 or more G8) / 30 /
 (Examples: Me / Et / 33)



G8 = dialkylamino <each alkyl containing 1-6 C> /
 heterocycle <containing 1-2 heteroatoms, 1-2 N,
 up to 1 O (no other heteroatoms),
 5- to 7-membered monocyclic ring> / (up to 3) OH /
 alkoxy <containing 1-4 C> / R

G9 = alkylene <containing 1 or more C>
 (opt. substd. by 1 or more G8)

G10 = alkyl <containing 1 or more C>
 (opt. substd. by 1 or more G8)

Patent location: claim 5

Note: oxygens at 7 and 47 are free radicals

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 21 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 135:61762 MARPAT Full-text

TITLE: Gas or slurry polymerization of olefins using spray
 dried catalyst composition

INVENTOR(S): Oskam, John H.; Lynn, Timothy R.; Morrison, Vincent P.

PATENT ASSIGNEE(S): Univation Technologies, LLC, USA

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

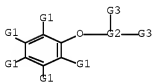
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 2001044321 | A1 | 20010621 | WO 2000-US13308 | 20000515 |
| W: AU, BR, BY, CA, CN, CZ, ID, IL, IN, JP, KR, MX, NO, PL, RU, SG, SK, TR, ZA, AM, AZ, KG, KZ, MD, TJ, TM | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 6281306 | B1 | 20010828 | US 1999-464114 | 19991216 |
| CA 2394516 | A1 | 20010621 | CA 2000-2394516 | 20000515 |
| CA 2394516 | C | 20060718 | | |
| TW 500729 | B | 20020901 | TW 2000-89109270 | 20000515 |
| EP 1240213 | A1 | 20020918 | EP 2000-930739 | 20000515 |
| EP 1240213 | B1 | 20071205 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY | | | | |
| TR 200201969 | T2 | 20021223 | TR 2002-1969 | 20000515 |
| BR 2000017027 | A | 20030128 | BR 2000-17027 | 20000515 |
| EG 22572 | A | 20030430 | EG 2000-629 | 20000515 |

| | | | | |
|---|----|----------|-----------------|----------|
| JP 2003517058 | T | 20030520 | JP 2001-544808 | 20000515 |
| AU 776622 | B2 | 20040916 | AU 2000-48507 | 20000515 |
| RU 2238281 | C2 | 20041020 | RU 2002-119207 | 20000515 |
| CN 1206247 | C | 20050615 | CN 2000-818181 | 20000515 |
| AT 380203 | T | 20071215 | AT 2000-930739 | 20000515 |
| EP 1914252 | A1 | 20080423 | EP 2007-23470 | 20000515 |
| R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| ES 2298142 | T3 | 20080516 | ES 2000-930739 | 20000515 |
| CZ 300207 | B6 | 20090318 | CZ 2002-2088 | 20000515 |
| US 20010034423 | A1 | 20011025 | US 2001-867156 | 20010529 |
| US 6656868 | B2 | 20031202 | | |
| ZA 2002004775 | A | 20031203 | ZA 2002-4775 | 20020613 |
| NO 2002002851 | A | 20020815 | NO 2002-2851 | 20020614 |
| NO 327079 | B1 | 20090420 | | |
| MX 2002005907 | A | 20040812 | MX 2002-5907 | 20020614 |
| IN 2002DN00605 | A | 20090116 | IN 2002-DN605 | 20020614 |
| NO 2008003814 | A | 20020815 | NO 2008-3814 | 20080908 |
| PRIORITY APPLN. INFO.: | | | US 1999-464114 | 19991216 |
| | | | EP 2000-930739 | 20000515 |
| | | | WO 2000-US13308 | 20000515 |

AB The title polymn. process comprises combining an olefin in the gas or slurry phase with a spray dried catalyst comprising an activator, a particulate filler and a metal catalyst compound such as a phenoxide or metallocene. Thus, slurry polymerization of C₂H₄ at 65° in the presence of spray dried (Al/Zr ratio 536:1) 0.38 μmol catalyst of 0.075 g {(2,4,6-Me₃C₆H₂)NCH₂CH₂[2NH]ZrBz₂, 5 g Cabosil TS 610, and Me aluminoxane activator to give polyethylene at catalyst activity 233,800 g polymer/mmol catalyst/h.

MSR 3



- G1 = H / R / (Specifically claimed: alkyl <containing 4-20 C> / Bu-n / Bu-i / pentyl / hexyl / heptyl / isohexyl / octyl / decyl / undecyl / dodecyl)
- G2 = R <"Group 3 to 10 transition metal or lanathanide"> / 38 / (Specifically claimed: Ti / Zr / Hf)

3⁵—G3

- G3 = alkyl / halo / CH₂Ph / NH₂ (opt. substd.) / 18 / 21 / 24 / H / alkoxy

1⁸—C(O)—R 2⁹—C(O)—G4 2⁸—R

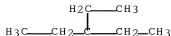
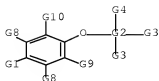
G4 = NH2 (opt. substd.)
 G5 = R <"Group 3 to 10 transition metal or lanthanide">
 / (Specifically claimed: Ti / Zr / Hf)
 Patent location: claim 28
 Note: additional metal valences and ring formation also
 claimed

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

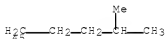
L17 ANSWER 22 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 135:318841 MARPAT Full-text
 TITLE: Production method of olefin polymerization catalysts
 INVENTOR(S): Whiteker, Gregory T.; Smith, Jack A.
 PATENT ASSIGNEE(S): Univation Technologies, LLC, USA
 SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S.
 Ser. No. 216,594.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 20010031843 | A1 | 20011018 | US 1999-248147 | 19990210 |
| US 6333389 | B1 | 20011225 | | |
| WO 2000037512 | A2 | 20000629 | WO 1999-US29755 | 19991214 |
| WO 2000037512 | A3 | 20001019 | | |
| W: AU, BR, CA, JP | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 20020016254 | A1 | 20020207 | US 2001-932910 | 20010820 |
| PRIORITY APPLN. INFO.: | | | US 1998-216594 | 19981218 |
| | | | US 1999-248147 | 19990210 |

AB This invention relates to a catalyst system comprising an activator and at least one heteroatom substituted phenoxide group 3-10 transition metal or lanthanide metal compds. wherein the metal is bound to the oxygen of the phenoxide group and provided that: (a) if more than one heteroatom substituted phenoxide is present it is not bridged to the other heteroatom substituted phenoxide, (b) if the metal is a Group 4 metal then the carbon adjacent to the carbon bound to the oxygen of the phenoxide may not be bound to an aldehyde or an ester, (c) the carbon ortho to the carbon bound to the oxygen of the phenoxide may not be bound to the C1 carbon in a group represented by the formula: wherein R6 and R7 = independently H, halogen, a hydrocarbon group, a heterocyclic compound residue, an oxygen containing group, a nitrogen containing group, a boron containing group, a sulfur containing group, a phosphorus containing group, a silicon containing group, a germanium containing group, or a tin containing group, and R1 and R2 = may bonded to each other to form a ring. The activator may be an Al alkyl, an alumoxane, a modified alumoxane, a noncoordinating anion, a borane, a borate or a mixture thereof.



G1 = H / R <"heteroatom-containing group",
containing 1 or more heteroatoms> /
hydrocarbyl <containing 1-100 C> /
(Examples: alkyl <containing 4-20 C> / Bu-n / Bu-i / Bu-t /
pentyl / hexyl / heptyl / 45 / octyl / decyl / nonyl /
dodecyl)



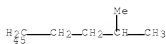
G2 = R <"Group 3-10 transition metal or lanthanide
metal"> / (Specifically claimed: Zr / Ti / Hf)
G3 = R <"anionic ligand"> / (Specifically claimed: halo /
alkyl / 29 / 32 / 35 / H / alkoxy)



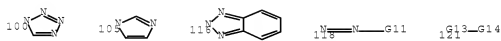
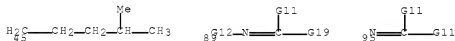
G4 = R <"anionic ligand"> / 27 /
(Specifically claimed: halo / alkyl / 37 / 40 / 43 / H /
alkoxy)



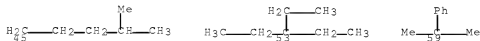
G5 = H / R
G6 = NH / O
G7 = NH2 (opt. subst'd.)
G8 = H / R <"heteroatom-containing group",
containing 1 or more heteroatoms> /
hydrocarbyl <containing 1-100 C> /
(Specifically claimed: Bu-n / Bu-i / Bu-t / pentyl / hexyl /
heptyl / 45 / octyl / decyl / nonyl / dodecyl) /
(Example: alkyl <containing 4-20 C>)



G9 = H / R <"heteroatom-containing group",
containing 1 or more heteroatoms> /
hydrocarbyl <containing 1-100 C> /
(Examples: alkyl <containing 4-20 C> / Bu-n / Bu-i / Bu-t /
pentyl / hexyl / heptyl / 45 / octyl / decyl / nonyl /
dodecyl / 89 / 95 / 100 / 105 / 116 / 118 / 118 / NH2 / 121 / OH /
125 / 130 / 133 / 136 / SH / 147 / 149 / 152 / 160)



G10 = H / R <"heteroatom-containing group",
containing 1 or more heteroatoms> /
hydrocarbyl <containing 1-100 C> /
(Specifically claimed: alkyl <containing 4-20 C> / Bu-n /
Bu-i / Bu-t / pentyl / hexyl / heptyl / 45 / octyl / decyl /
nonyl / dodecyl) / (Examples: C(Me)2CH2Me / 53 / 59 / CPh3 /
SiMe3 / 63 / 67)





G11 = H / alkyl / aryl / SiH3 (opt. substd.) / OH / 169



G12 = CH2 (opt. substd.)

G13 = NH / 123 / O



G14 = alkyl / aryl / SiH3 (opt. substd.) / OH / 171



G15 = OH / 127 / 139 / 142 / 145 / SH / 163 / NH2 / 165



G16 = O / S / 156



G17 = NH / 167



G18 = alkyl / aryl / SiH3 (opt. substd.)

G19 = H / alkyl / aryl / SiH3 (opt. substd.) / OH / 173 /
(Example: Ph)



Patent location:

claim 12

Note:

substitution is restricted

Note:

additional ring formation also claimed

Note:

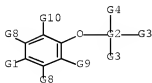
and metal complexes

ACCESSION NUMBER: 133:74465 MARPAT Full-text
 TITLE: Olefin polymerization catalysts, their production and use
 INVENTOR(S): Whiteker, Gregory T.; Smith, Jack A.
 PATENT ASSIGNEE(S): Univation Technologies, LLC, USA
 SOURCE: PCT Int. Appl., 28 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| ----- | ---- | ----- | ----- | ----- |
| WO 2000037512 | A2 | 20000629 | WO 1999-US29755 | 19991214 |
| WO 2000037512 | A3 | 20001019 | | |
| W: AU, BR, CA, JP | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 20010031843 | A1 | 20011018 | US 1999-248147 | 19990210 |
| US 6333389 | B1 | 20011225 | | |
| PRIORITY APPLN. INFO.: | | | US 1998-216594 | 19981218 |
| | | | US 1999-248147 | 19990210 |

AB This invention relates to a catalyst system comprising an activator and one or more heteroatom substituted phenoxide group 3 to 10 transition metal or lanthanide metal compds. wherein the metal is bound to the oxygen of the phenoxide group and provided that: (a) if more than one heteroatom substituted phenoxide is present it is not bridged to the other heteroatom substituted phenoxide; (b) if the metal is a group 4 metal then the carbon adjacent to the carbon bound to the oxygen of the phenoxide may not be bound to an aldehyde or an ester; and (c) the carbon ortho to the carbon bound to the oxygen of the phenoxide may not be bound to C1 carbon in group represented by C1R7:NR6 wherein R6 and R7 are independently hydrogen, halogen, a hydrocarbon group, a heterocyclic compound residue, an oxygen containing group, a nitrogen containing group, a boron containing group, a sulfur containing group, a phosphorus containing group, a silicon containing group, a germanium containing group, or a tin containing group, and R1 and R2 may be bonded to each other to form a ring. The activator may be an aluminum alkyl, an alumoxane, a modified alumoxane, a non-coordinating anion, a borane, a borate or a mixture thereof. Polyethylene was prepared using bis(N-benzylidene-2-hydroxy-3,5-di-tert-butylbenzylamine) zirconium(IV) dibenzyl and MAO catalysts.

MSTR 1A



G1 = H / R <"heteroatom-containing group",
 containing 1 or more heteroatoms> /
 hydrocarbyl <containing 1-100 C> / (Example: Bu-t)

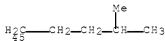
- G2 = R <"Group 3-10 transition metal or lanthanide metal"> / (Specifically claimed: Zr / Ti) / (Example: Hf)
 G3 = R <"anionic ligand"> / (Specifically claimed: halo / alkyl / 29 / 32 / 35 / H / alkoxy)



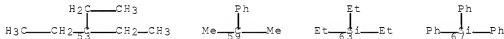
- G4 = R <"anionic ligand"> / 27 / (Specifically claimed: halo / alkyl / 37 / 40 / 43 / H / alkoxy)



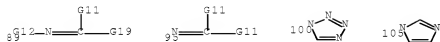
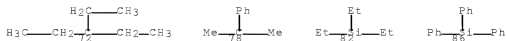
- G5 = H / R
 G6 = NH / O
 G7 = NH2 (opt. substd.)
 G8 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Specifically claimed: Bu-n / Bu-i / Bu-t / pentyl / hexyl / heptyl / 45 / octyl / decyl / nonyl / dodecyl)



- G9 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Specifically claimed: alkyl <containing 4-20 C>) / (Examples: Bu-t / C(Me)2CH2Me / 53 / 59 / CPh3 / SiMe3 / 63 / 67)



- G10 = H / R <"heteroatom-containing group", containing 1 or more heteroatoms> / hydrocarbyl <containing 1-100 C> / (Examples: Bu-t / C(Me)2CH2Me / 72 / 78 / CPh3 / SiMe3 / 82 / 86 / 89 / 95 / 100 / 105 / 116 / 118 / NH2 / 121 / OH / 125 / 130 / 133 / 136 / SH / 147 / 149 / 152 / 160)



G11 = H / alkyl / aryl / SiH3 (opt. substd.) / OH / 169



G12 = CH2 (opt. substd.)

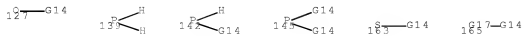
G13 = NH / 123 / O



G14 = alkyl / aryl / SiH3 (opt. substd.) / OH / 171



G15 = OH / 127 / 139 / 142 / 145 / SH / 163 / NH2 / 165



G16 = O / S / 156



G17 = NH / 167

187—G14

G18 = alkyl / aryl / SiH3 (opt. substd.)

G19 = H / alkyl / aryl / SiH3 (opt. substd.) / OH / 173 /
(Example: Ph)

193—G18

Patent location: claim 2
Note: substitution is restricted

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 24 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 123:343608 MARPAT Full-text
TITLE: Organometallic acrylamide compositions, their
preparation and their antimicrobial use
INVENTOR(S): Babirad, Stefan Allan; Bigham, Wilson Stuart
PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA
SOURCE: Ger. Offen., 13 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

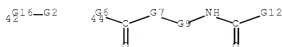
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|----------|
| DE 19500310 | A1 | 19950713 | DE 1995-19500310 | 19950107 |
| US 5639843 | A | 19970617 | US 1994-180882 | 19940112 |
| CA 2138914 | A1 | 19950713 | CA 1994-2138914 | 19941222 |
| PRIORITY APPLN. INFO.: | | | US 1994-180882 | 19940112 |

AB The comps. comprise the reaction product of an organometallic nucleophile and an azlactone. The products may be monomeric or polymeric and are useful for antifouling coatings. Thus, 4,4-dimethyl-2-vinylazlactone-Me methacrylate copolymer was treated with dimethylhydroxytin oleate in the presence of a catalyst to provide a product showing acrylamide characteristics in its IR spectrum. This material was used as an algicidal coating on asphalt shingles and was less prone to migration than a conventional tributyltin polymer composition

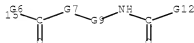
MSTR 1

G3
G5—4—G1
G3

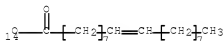
G1 = 42 / OH / SH / NH2 / alkylamino /
(Specifically claimed: 44)



G2 = OH / SH / NH2 / alkylamino /
(Specifically claimed: 15)



G3 = alkyl / aryl <containing 5-12 C>
(opt. substd. by 1 or more G14) /
heteroaryl <containing 5-12 atoms>
(opt. substd. by 1 or more G14) / Me / (Examples: Bu-n / Ph)
G4 = meta / (Specifically claimed: Sn / Ge)
G5 = alkyl / aryl <containing 5-12 C>
(opt. substd. by 1 or more G14) /
heteroaryl <containing 5-12 atoms>
(opt. substd. by 1 or more G14) /
(Specifically claimed: 14) / (Examples: Bu-n / Ph / OH)



G6 = O / S / NH / 27



G7 = {0-1} 30



G8 = H / alkyl <containing 1-4 C> / (Example: Me)
G9 = 33 / cycloalkylene <containing 4-12 C,
attached through 1 C>



G10 = alkyl (opt. substd. by 1 or more aryl) /
cycloalkyl / aryl <containing 5-12 C> (opt. substd.) /
heteroaryl <containing 5-12 atoms> (opt. substd.) /
(Example: Me)

G11 = alkyl (opt. substd. by 1 or more aryl) /
cycloalkyl / (Example: Me)
G12 = R <"terminal group"> / 41



G13 = R <"optionally substituted multivalent binding
group not reactive with the azalactone">
G14 = R / (Examples: aryl (substd. by alkyl <containing
1-4 C> / alkyl <containing 1-4 C>
(substd. by 1 or more aryl) / alkoxy <containing 1-4 C> /
dialkylamino <each alkyl containing 1-4 C> / NO2 / CN /
halo / alkoxycarbonyl <containing 1-4 C>)
G15 = alkyl <containing 1-4 C>
G16 = (1-4) CH2

Patent location: claim 2
Note: also incorporates claim 5

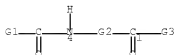
L17 ANSWER 25 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 121:238462 MARPAT Full-text
TITLE: surface coating of surgical filaments with acylamino
acid polyvalent salts to improve smoothness
INVENTOR(S): Shinoda, Norimasa; Ootaguro, Masazo; Funae, Akihiro;
Iimuro, Shigeru
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 06181978 | A | 19940705 | JP 1992-340137 | 19921221 |
| PRIORITY APPLN. INFO.: | | | JP 1992-340137 | 19921221 |

AB The surface of bioabsorbable filaments (sutures) for surgical use is coated with acylamino acid polyvalent salts (filament: acyl amino acid polyvalent salt = 100: 1-20wt. parts). The filaments showed improved surface smoothness under wet conditions.

MSTR 1B

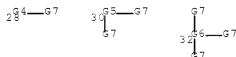


G1 = alkyl <containing 7-21 C> (opt. substd. by OH) /

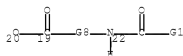
alkenyl <containing 7-21 C>
 G2 = CH2 / CH2CH2 / CH2CH2CH2 / 16-4 18-1 / 10-4 12-1 /
 13-4 15-1



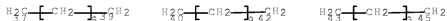
G3 = 29 / 30 / 32



G4 = metal / (Examples: Ca / Zn / Fe / Mg)
 G5 = metal / (Examples: Al / Fe / Ti)
 G6 = metal / (Examples: Ge / Ti)
 G7 = OH / 20



G8 = 37-19 39-22 / 40-19 42-22 / 43-19 45-22



Patent location: claim 1

L17 ANSWER 26 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 120:307098 MARPAT Full-text
 TITLE: Water- and oil-repellent powders containing acyl amino
 acid polyvalent metal salts coated with fluorine
 compounds and cosmetics containing the powders
 INVENTOR(S): Kashimoto, Akio; Kyomasu, Ayumi; Yano, Shinji; Takada,
 Hiroshi
 PATENT ASSIGNEE(S): Kao Corp, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 05339127 | A | 19931221 | JP 1992-153714 | 19920612 |
| JP 3167422 | B2 | 20010521 | | |

JP 1992-153714 19920612

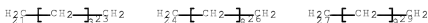
MSTR 1B



G1 = alkyl <containing 7-21 C> (opt. substd. by OH) /
alkenyl <containing 7-21 C>
G2 = CH2 / CH2CH2 / CH2CH2CH2 / 6-3 8-5 / 9-3 11-5 /
12-3 14-5



G3 = metal / (Examples: Ca / Zn / Mg / Fe)
G4 = 21-16 23-18 / 24-16 26-18 / 27-16 29-18


$$G5 = OH / 32$$


Patent location: claim 1

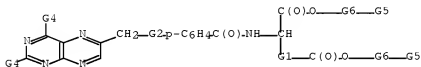
L17 ANSWER 27 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 118:132126 MARPAT Full-text
 TITLE: Treatment of psoriasis with methotrexate metal salts
 INVENTOR(S): Loev, Bernard
 PATENT ASSIGNEE(S): Chemex Pharmaceuticals, Inc., USA
 SOURCE: U.S., 6 pp. Cont. of U.S. Ser. No. 404,424, abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

| | | | | |
|------------------------|---|----------|----------------|----------|
| US 5166149 | A | 19921124 | US 1991-713558 | 19910610 |
| US 5292731 | A | 19940308 | US 1992-916432 | 19920721 |
| PRIORITY APPLN. INFO.: | | | US 1989-404424 | 19890908 |
| | | | US 1991-713558 | 19910610 |

AB Metal salts of methotrexate or of its analogs and derivs. (Markush given), are drugs for the treatment of psoriasis and hyperproliferative disorders (no data). A topical solution comprised Zn methotrexate 0.1-10.0, triethanolamine 0.1-10.0, propylene glycol 1.0-5.0, preservative 0.1-0.3, and water 74.7-98.7% by weight

MSR 2



G1 = {0-4} CH2
G2 = NH / 20

28—G3

G3 = alkyl <containing 1-5 C> /
(Specifically claimed: Me)
G4 = NH2 / alkylamino <containing 1-5 C> /
dialkylamino <each alkyl containing 1-5 C>
G5 = R <"anion"> / (Examples: Cl / OSO3H / OPO3H2 / 32)

32—NO2

G6 = metal / (Specifically claimed: Zn / Cu / Cd / Mn)
Patent location: claim 1

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 28 OF 31 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 116:91143 MARPAT Full-text
TITLE: Pigment consisting of polyvalent metal salt of acylated amino acid or amidosulfonic acid and cosmetic composition containing the same
INVENTOR(S): Shinohara, Ryutaro; Nozaki, Toshio; Tachizawa, Osamu
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Eur. Pat. Appl., 41 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| EP 455018 | A1 | 19911106 | EP 1991-105803 | 19910411 |
| EP 455018 | B1 | 19940907 | | |
| R: DE, FR, GB | | | | |
| JP 03294210 | A | 19911225 | JP 1990-95328 | 19900411 |
| JP 06102606 | B | 19941214 | | |
| JP 04005216 | A | 19920109 | JP 1990-108233 | 19900424 |
| JP 2887499 | B2 | 19990426 | | |
| US 5167709 | A | 19921201 | US 1991-683153 | 19910410 |
| PRIORITY APPLN. INFO.: | | | JP 1990-95328 | 19900411 |
| | | | JP 1990-108233 | 19900424 |

AB A pigment consisting of a polyvalent metal salt of an amidosulfonic acid [RCON(R1)XSO3]nM(OH)m-n (I; R = C7-21 alkyl, alkenyl, hydroxyalkyl; R1 = H, Me; X = ethylene, propylene, etc.; M = polyvalent metal; m = valence of M; n = 1-4) or an amino acid analog of I is prepared and used in cosmetics. N-Palmitoyltaurine Ca (I) was prepared by reaction of N-palmitoyltaurine Na with CaCl2. A face powder contained I 50, TiO2 0.5, red iron oxide 0.1, liquid paraffin 1, perfume 0.1%, and talc for the balance.

MSTR 2B

G1—C(O)—NH—G2—C(O)—O—G4—G5

G1 = alkyl <containing 7-21 C>
 (opt. substd. by 1 or more OH) / alkenyl <containing 7-21 C>
 G2 = G3 / G8
 G3 = {3-5} CH2
 G4 = metal / 21 / (Examples: Ca / Zn / Mg / Fe / Ba)

296—G5

G5 = OH / 19

19—C(O)—G2—NH—C(O)—G1

G6 = metal / 23 / (Examples: Al / Fe / Ti)

297—G5

G7 = metal / (Examples: Ti / Zr)

G8 = (10-11) CH2

Patent location: claim 5

L17 ANSWER 29 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 115:218778 MARPAT Full-text

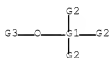
TITLE: Inorganic-organic or semiconductor composites, their preparations, and electrophotographic photoconductor

INVENTOR(S): containing them
 Yamamoto, Kohichi; Nakamura, Shigetoshi
 PATENT ASSIGNEE(S): Fuji Xerox Co., Ltd., Japan
 SOURCE: Ger. Offen., 37 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| DE 4010328 | A1 | 19901004 | DE 1990-4010328 | 19900330 |
| DE 4010328 | C2 | 19980129 | | |
| JP 02258839 | A | 19901019 | JP 1989-78530 | 19890331 |
| JP 02258840 | A | 19901019 | JP 1989-78531 | 19890331 |
| JP 2576065 | B2 | 19970129 | | |
| JP 02258841 | A | 19901019 | JP 1989-78532 | 19890331 |
| JP 02258842 | A | 19901019 | JP 1989-78533 | 19890331 |
| JP 2576066 | B2 | 19970129 | | |
| JP 02259767 | A | 19901022 | JP 1989-78529 | 19890331 |
| JP 07120051 | B | 19951220 | | |
| JP 02259765 | A | 19901022 | JP 1989-78534 | 19890331 |
| US 5168024 | A | 19921201 | US 1990-501841 | 19900330 |
| PRIORITY APPLN. INFO.: | | | JP 1989-78529 | 19890331 |
| | | | JP 1989-78530 | 19890331 |
| | | | JP 1989-78531 | 19890331 |
| | | | JP 1989-78532 | 19890331 |
| | | | JP 1989-78533 | 19890331 |
| | | | JP 1989-78534 | 19890331 |

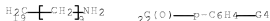
AB Inorg.-org. composites or semiconductor composites are claimed which are prepared by polycondensation of ≥ 1 metal alkoxide by the sol-gel method in the presence of an organic compound, where the metal alkoxide is selected from the group of $X1M1(OR1)(OR2)$, $X1M2(OR1)(OR2)(OR3)$, and $X1M2(OR1)(OR2)X2$ or $X1OM1(OR1)(OR2)$, $X1OM2(OR1)(OR2)(OR3)$, and $X1OM2(OR1)(OR2)X2$ [$M1$ = trivalent metal; $M2$ = tetravalent metal, C ; $R1-R3$ = H , alkyl, ≥ 1 of $R1-R3$ is $C1-6$ alkyl; $X1$, $X2$ = alkyl, aryl, aralkyl, acyl, heterocyclic, unsatd. hydrocarbyl; $X1$ and $X2$ together may form a ring]. The organic compound has affinity to the metal alkoxide. An electrophotog. photoconductor with a charge-transporting layer from the above composite, where the specified organic compound is a charge-transporting agent, is also claimed.

MSTR 5A



G1 = C / metal / (Specifically claimed: Si / Ge / Sn / Ti / Zr)
 G2 = OH / 1 or more alkoxy <containing 1-6 C >
 G3 = alkyl <containing 5 or more C > (opt. substd.) /
 aryl (opt. substd.) / aralkyl (opt. substd.) / acyl /
 heterocycle (opt. substd.) / hydrocarbyl (opt. substd.) /

(Examples: Ph / 7 / CPh / cyclohexyl / 9 / 14 / 19 / 22)



G4 = CH2Ph / Ph

Patent location: claim 1

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 30 OF 31 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 112:139/35 MARPAT Full-text

TITLE: 2,2-Disubstituted glycerol and glycerol-like compounds as antiinflammatories and platelet activating factor (PAF) antagonists

INVENTOR(S): Solomon, Daniel M.; Kaminski, James J.; White, Steven K.; Lehman, Laura S.; Ganguly, Ashit K.

PATENT ASSIGNEE(S): Schering Corp., USA

SOURCE: Eur. Pat. Appl., 101 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 327962 | A1 | 19890816 | EP 1989-101794 | 19890202 |
| R: ES, GR | | | | |
| WO 8907099 | A1 | 19890810 | WO 1988-US315 | 19880205 |
| W: AT, AU, BB, BG, BR, CH, DE, DK, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU, US | | | | |
| RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG | | | | |
| AU 8812946 | A | 19890825 | AU 1988-12946 | 19880205 |
| WO 8907100 | A1 | 19890810 | WO 1989-US336 | 19890202 |
| W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US | | | | |
| RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG | | | | |
| AU 8931918 | A | 19890825 | AU 1989-31918 | 19890202 |
| EP 398990 | A1 | 19901128 | EP 1989-902853 | 19890202 |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| JP 03501612 | T | 19910411 | JP 1989-502646 | 19890202 |
| JP 06062542 | B | 19940817 | | |
| DK 9001857 | A | 19901004 | DK 1990-1857 | 19900803 |
| JP 07165739 | A | 19950627 | JP 1994-16152 | 19940210 |
| JP 07179406 | A | 19950718 | JP 1994-16159 | 19940210 |
| PRIORITY APPLN. INFO.: | | | WO 1988-US315 | 19880205 |
| | | | WO 1989-US336 | 19890202 |

GI For diagram(s), see printed CA Issue.

AB Title compds. R1OCH2CR2R3CH2R4 [I; R1 = alkyl, CONR5R6; R5 = H, alkyl, aryl, etc.; R6 = alkyl, aryl, etc.; R5R6N = heterocyclyl; R2 = alkyl, CF3, aralkyl, aryl; R3 = XCmHm+1; X = CH2, O, NR7, SOn; m = 1-6; n = 0,1; R7 = H, alkyl, acyl; R4 = TUV; T = OPO3, OCO2, O, S, NR7, OCONR7, NR7CO2; U = (CH2)l (l = 2-10), (CH2)kC6H4(CH2)k (k = 1-3); V = AZ, Z = bond, O, S, O(CH2)o (o = 1-3), OCO2, NR7; A = alkyl, heteroaryl, etc.; with the proviso that when R1 = alkyl, T ≠ OPO3] are prepared, e.g. by (1) reaction of R1OCH2CR2R3CH2TUL1 (II) and L2ZA (L1, R2 = leaving group), (2) reaction of R1OCH2CR2R3CH2O2CL1 and L2OUV for I (T = OCO2), and (3) N-alkylation of H2NCO2CHCR2R3CH2R4 for I (R1 = CONHR6; R6 = alkyl). Treatment of n-C18H37NMeCO2CH2CMe(OMe)CH2O(CH2)17OSO2Me (preparation given) in the presence of Bu4N+I- gave a thiazolinium compound III. III at 50 μM showed 100% inhibition of PAF-induced platelet aggregation. Pharmaceutical formulation examples are given.

MSTP 3A



- G1 = R <"leaving group"> / (Examples: H / metal)
 G6 = alkyl <containing 1-6 C> /
 alkylcarbonyl <containing 1-20 C> /
 cycloalkylcarbonyl <containing 3-8 C>
 G12 = O / 210-207 211-38 / NH / 212



- G13 = alkyl <containing 1-20 C> (opt. substd.) /
 R <"optionally substituted heteroalkyl"> /
 heterocycle <containing 1-3 heteroatoms, zero or more O,
 zero or more S, zero or more N (no other heteroatoms),
 3- to 7-membered monocyclic ring> (opt. substd.) /
 aryl <containing 6-14 C> / heteroaryl <containing 1-4
 heteroatoms> (opt. substd.) / 44 /
 (Specifically claimed: 55 / 66 / 3-pyridyl / 72 / 83 / 77 /
 89 / 95 / 191 / 106 / 112 / pyrrolidino / morpholino / 118 /
 197 / 203 / 130 / 140 / 143 / 150 / 157 / 165) /
 (Example: Ph)



DOCUMENT TYPE: CODEN: EPXXDW
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: English
 PATENT INFORMATION: 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 314166 | A1 | 19890503 | EP 1988-118004 | 19881028 |
| EP 314166 | B1 | 19930505 | | |
| R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| DE 3736686 | A1 | 19890511 | DE 1987-3736686 | 19871029 |
| JP 02022105 | A | 19900125 | JP 1988-267310 | 19881025 |
| US 5049371 | A | 19910917 | US 1988-263883 | 19881028 |
| AT 88983 | T | 19930515 | AT 1988-118004 | 19881028 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | DE 1987-3736686 | 19871029 |
| | | | EP 1988-118004 | 19881028 |

AB Particulate oxides and hydroxides are manufd. by converting hydrolyzable compds. with water in an organic solvent containing a complexing agent. The process further comprises separating and optionally purifying the resulting precipitate, and calcinating the precipitate. The powders are useful for the manufacture of ceramics and catalyst supports. This process permits the reproducible manufacture of monodisperse oxides and hydroxides with controllable particle size. Thus, 40 mL 1M ethanolic Zr(Me2CHO)4 was mixed with 20 mL 5% ethanolic hydroxypropylcellulose and 10 mL EtOH in 4 sep. operations. To each mixture was added 2.1 mL 65% HNO3 and 0.6 mL water, and 1.2, 1.6, 2.0, or 2.4 g acetylacetone. After drying at 100°, the resulting ZrO2 ppts. had average particle diameter 0.6, 1.0, 1.5, and 2.5 µm. Calcination at 700° resulted in a decrease of the diameter by 40%.

MGTR 3A

G1—G2

G1 = halo / carbon chain (opt. substd. by 1 or more G6) /
 Z3 / 27

2G7—G8 2G—C(O)—G8

G2 = a / 7 / 10

G1—G3—G1
 G1—G4—G1 1G—G1

G3 = Al / V / Ti / U / B
 G4 = V / Ti / Zr / Hf / Sn / U / Si
 G6 = halo / alkoxy / NO2 / dialkylamino
 G7 = O / NH / 30

G8 = carbon chain (opt. subst'd. by 1 or more G6)
 Patent location: disclosure

=> LOG HOLD

(FILE 'HOME' ENTERED AT 21:58:30 ON 28 SEP 2009)

FILE 'REGISTRY' ENTERED AT 21:58:48 ON 28 SEP 2009

L1 STRUCTURE UPLOADED
 D
 L2 1 SEA FILE=REGISTRY SSS SAM L1
 L3 5 SEA FILE=REGISTRY SSS FUL L1
 D L3 1-5

FILE 'STNGUIDE' ENTERED AT 22:01:02 ON 28 SEP 2009

FILE 'CAPLUS' ENTERED AT 22:15:41 ON 28 SEP 2009
 L4 8 SEA FILE=CAPLUS SPE=ON PLU=ON L3
 D L4 1-8 IBIB ABS HITSTR

FILE 'STNGUIDE' ENTERED AT 22:16:22 ON 28 SEP 2009

FILE 'REGISTRY' ENTERED AT 22:28:21 ON 28 SEP 2009
 L5 STRUCTURE UPLOADED
 D
 L6 0 SEA FILE=REGISTRY SSS SAM L5
 L7 0 SEA FILE=REGISTRY SSS FUL L5

FILE 'STNGUIDE' ENTERED AT 22:28:59 ON 28 SEP 2009

FILE 'REGISTRY' ENTERED AT 22:30:15 ON 28 SEP 2009
 L8 STRUCTURE UPLOADED
 D
 L9 3 SEA FILE=REGISTRY SSS SAM L8
 D SCAN
 L10 33 SEA FILE=REGISTRY SSS FUL L8
 D L10 1-33

FILE 'STNGUIDE' ENTERED AT 22:31:24 ON 28 SEP 2009

FILE 'CAPLUS, MARPAT, REGISTRY' ENTERED AT 22:35:26 ON 28 SEP 2009
 L11 STRUCTURE UPLOADED
 D
 L12 0 SEA FILE=REGISTRY SSS SAM L11
 L13 4 SEA FILE=MARPAT SSS SAM L11
 L14 0 SEA FILE=REGISTRY SSS FUL L11
 L15 31 SEA FILE=MARPAT SSS FUL L11
 L16 0 SEA FILE=CAPLUS SPE=ON PLU=ON L14
 SET DUPORDER FILE
 L17 31 DUP REM L15 L16 (0 DUPLICATES REMOVED)
 ANSWERS '1-31' FROM FILE MARPAT
 D L17 1-31 IBIB ABS FHIT

COST IN U.S. DOLLARS

SINCE FILE
 ENTRY

TOTAL
 SESSION

| | | |
|--|------------|---------|
| FULL ESTIMATED COST | 408.82 | 1095.83 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | -24.18 | -30.74 |

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 22:39:18 ON 28 SEP 2009